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ENGRAVED FOR THE BEE.



## LORD MILTON.

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# THE BEE,

OR

## LITERARY WEEKLY INTELLIGENCER,

CONSISTING OF

ORIGINAL PIECES AND SELECTIONS FROM PERFORMANCES  
OF MERIT, FOREIGN AND DOMESTIC.

A WORK CALCULATED TO DISSEMINATE USEFUL KNOWLEDGE  
AMONG ALL RANKS OF PEOPLE AT A SMALL EXPENCE,

BY

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F.R.S. F.A.S. S.

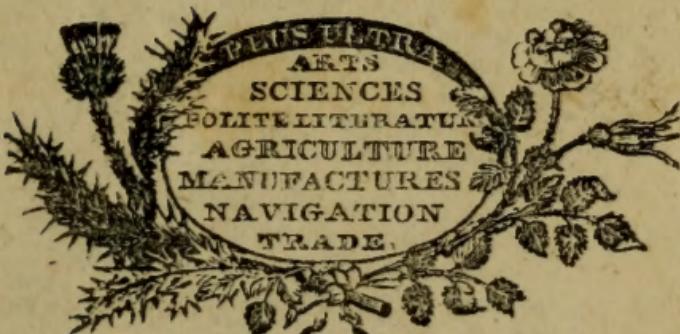
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VOLUME ELEVENTH.

APIS MATINÆ MORE MODOQUE.

HORACE.



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WEDNESDAY, SEPTEMBER 5. 1792.

SKETCH OF THE LIFE OF ANDREW FLETCHER OF  
SALTON, ONE OF THE SENATORS OF THE COLLEGE  
OF JUSTICE, COMMONLY CALLED LORD MILTON.

*With a portrait.*

LORD MILTON, the faithful friend and co-adjutor of Archibald duke of Argyll, as minister for Scotland, was the son of Henry Fletcher of Salton, the immediate younger brother of the famous Andrew Fletcher, the defender of the liberty and independence of Scotland \*.

\* The family of Salton, Fletcher, is said to be originally from the county of Tweeddale; that Robert Fletcher, the first of the family in Scotland, was of the Fletchers of Sussex; that Andrew, the son of Robert, was a merchant of eminence at Dundee, whose son David, purchased the estate of Innerpeffer, in the county of Angus, and married a daughter of Ogilvie of Paurie, by whom he had three sons, Robert, Andrew, and David.

Robert eldest, son of the laird of Innerpeffer, succeeded to his father in the year 1597, when he bought the estate of Bencho, and other lands in the same county, and died in the year 1613, leaving six sons; Andrew; James provost of Dundee; Robert, to whom he gave Bencho; George

His mother was the daughter of Sir David Carnegie of Pitarrow, baronet, and granddaughter of David, earl of Southesk ; who was married to Henry in the year 1688.

Lord Milton's father, though he inherited much of the genius, vivacity, and probity of his family, is not to be traced by his public character. He was devout and studious, and attached to rural affairs.

His wife appears to have been a woman of singular merit and enterprise, for the benefit of her family, and the good of her country. She went, during the troubles in which the family of Fletcher was involved, to Holland, taking with her a mill-wright and weaver, both men of genius and enterprise in their respective departments ; and by their means she secretly obtained the art of weaving and dressing, what was then, as it is now, commonly called *holland* (fine linen;) and introduced the manufacture into the village and neighbourhood of Salton\*.

Andrew, the eldest son of this respectable couple, was born in the year 1692, and educated with a view to the profession of the bar in Scotland. He was

proprietor of the estate of Restennote in Angus ; John, dean of Carlisle ; and Patrick, who died abroad in the service of the states general of Holland.

David Fletcher, bishop of Argyll, was the eldest son of Andrew, the second son of Innerpeffer. John, the immediate younger brother of the bishop, was lord advocate of Scotland in the reign of Charles II. whose heir James, son of the bishop of Argyll, left an only daughter Elizabeth, who was married to Sir James Dalrymple of Cousland, to whom she brought the estate of Cranston, now inherited by her grandson, Sir John Dalrymple Hamilton Macgill bart.

\* Memoirs of the family, MSS.

admitted an advocate on the 26th of February 1717, one of the lords of Session on the 4th of June 1724, and lord justice clerk on the 21st of July 1735, which office, on being appointed keeper of the signet in the year 1748, he relinquished.

The acuteness of lord Milton's understanding, his judgement and address, and his minute knowledge of the laws, customs, and temper of Scotland, recommended him early to the notice, favour, and confidence of Archibald duke of Argyll; and he conducted himself during the unhappy rebellion 1745, in the important office of lord justice clerk, with so much discretion, that even the unfortunate party acknowledged, that by the mild and judicious exercise of his authority, the impetuosity of wanton punishment was restrained, and lenient measures adopted for the concealment, or recal, of such of the rebels as had been rather inveigled and betrayed into acts of hostility, than impelled by any deep laid designs to overturn the established government. He overlooked or despised many of the informations which came to his office through the channels of officious malevolence; and after his death many sealed letters containing such informations, were found unopened in his repositories.

In the abolition of heritable jurisdictions in Scotland, lord Milton engaged with fervent zeal for the welfare of the country; and he no sooner observed the beginning of public tranquillity, than he impressed the mind of his illustrious patron, Archibald duke of Argyll, with brilliant designs for the promotion of trade, manufactures, improved agriculture, and

learning in Scotland. These he signally promoted by the patronage and direction of the public bank, the conventions of boroughs, the British Linen Company ; the protection of tenants in just litigation with their landlords in the court of Session, and the favouring of such British acts of parliament as were directed towards their security ; and lastly, by the good government of the city of Edinburgh, the patron of the university, in the choice of eminent professors, particularly in the school of medicine.

Nor was Milton inattentive to the police and good morals of the country, in the appointment of sheriffs, and clergymen to the crown presentations ; all which, though in the immediate power of the duke of Argyll, were in a great measure recommended by lord Milton.

He strenuously promoted that excellent scheme for the provision of the widows and children of the clergy ; which does so much credit likewise to the memory of Dr Webster, and that of the learned and good Maclaurin, who instituted the calculation, which has stood the test not only of Dr Price's strictures, but of more important experience.

It is pleasing to record with honour the names of illustrious and worthy compatriots ; and the writer of this little memorial has scarce ever affected any other ambition than that of being the herald and seneschal of the fame of his deserving countrymen.

It would be a task worthy of well informed leisure, to fill up the chasms of this slight sketch with a succinct account of the progressive improvements in Scotland, from the beginning of Milton's

career, till his death on the 13th of December 1766, the most rapid (perhaps) that ever took place in any age or country.

I cannot conclude this memoir, without observing that Milton, at the age of seventy, with all the vigour, spirit, and political rectitude of his excellent uncle Andrew Fletcher of Salton, entered into the support of the proposal for a Scotch militia, with the zeal of a true patriot ; and wrote an excellent letter to the then minister, Mr Grenville, which ought to be yet subjected to the consideration of his successors and of the country.

It is indeed truly astonishing, that the descendants of men who fought under the banners of Wallace and Bruce, and wrote the famous letter to the pope, should not aspire after the same honour and security which is enjoyed by Englishmen. An honour which is possessed by the Prussians and the subjects of the strictest monarchies on the continent. *Pudet hæc opprobria nobis, et dici potuisse et non potuisse refelli.*

A. B.

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## ON THE VIPER.

SIR, *To the Editor of the Bee.*

As I am one of your constant readers, I have frequently observed in your most industrious Bee, some extracts from the natural history of insects and animals, with which a great many of your readers are unacquainted. The reptile which is to be the subject of this letter, is known to a great many in this island ; but I suppose very few know the way and

manner by which the species is propagated ; I shall, therefore, inform you of what came lately to my knowledge of the viper or adder.

About twelve months ago, an honest labouring man in this place, while at his work, observed something lying on the side of a road, of which he at first took little notice ; but soon after having occasion to pass that way, observed it was not in the same place where he saw it at first, which raised his curiosity to take a more narrow inspection of it ; when, to his great surprise, he found it to be an adder, of about two feet three inches in length ; the skin of which was so thin that he plainly saw some living creatures moving within it. He by some means broke the skin, out of which came several thousands of young adders, rather more than one inch in length, with black heads, the back a whitish brown, the belly more inclined to white and clear. Having made these observations, he immediately dispatched them, in case they should have spread abroad in the country. When he came home, and told his story of what he had seen, some believed him, and others not, saying they had been maggots he had found in the skin of the adder. And so there was no more about it, until a few days ago, when a young man found, nearly in the same place, several thousands of the same kind of creatures, and nearly of the same size and colour, marching along a road, but no skin was to be seen near by them. From which I infer, that when they come to a certain size, they eat themselves out of it, and begin their journey. As they were within two or three feet of some long grafts, and about ten yards

from water, the man that found them stood by them lest they should go away among the grafts, and so lose sight of them, until another young man came in sight, whom he called to him, that he might fetch something to carry them home in, that they might be seen before they were destroyed. He came and told me, and I willingly went along with him, and found them all marching forward in a determinate order upon the road.

What took my attention most, was their order of marching;—they kept so close together that they very much resembled the shape of a large adder, being smaller at the head, and thicker in the middle, from thence tapering all the way to the other end.

They moved straight forward: the aggregate body was about one inch broad in their ranks at the head, one inch and one half in the middle, from thence smaller to the tail. They were about sixteen inches in length, and I think they would be about three quarters of an inch in depth, so that there was a great many creeping one above another, somewhat resembling a swarm of bees going up into the hive. I likewise observed when they met with any obstruction, such as a small stone, that they would all turn to one side of it; or if they divided their course they joined again as soon as they were past the cause of it. There seemed to be some wettish stuff amongst them; for when I separated a few from the main body, the dust stuck to them, and they could not creep but with great difficulty; however, they seemed to guard against that by keeping so closely together.

Having made these observations on them, I carried them home, to keep alive for sometime, until they should get more the appearance of the old ones, and put them into a wooden vessel with some dry earth in the bottom; taking the hint from the curse pronounced against the serpent in holy-writ. They soon got into order again, and marched round and round the vessel; but by some accident, when I was out of the way, it was overturned, so I judged it the safest way to make an end of them for fear of farther danger.

I send you inclosed a few of the young creatures that you may see them yourself, only I am afraid by the time you receive them they will be so dry, you will not be able to judge of them properly.

I would be much obliged to you, and, I dare say, so would a great many of your readers, if you were to give us some information through the channel of your Bee, how the species is propagated, and what method nature, or rather its author, has taken to prevent them increasing so fast; for I have heard so many stories about them that I give little heed to any of them. If you were to add the best remedy to prevent the fatal effects of their sting, it would make it both useful and entertaining. As this is about the time the bees begin to lay up their honey for winter, I should think myself very happy could this letter only supply the place of coarse wax, to contain the more sweet and precious treasure. I commit it to your disposal if you think it worth the inserting, I hope you will be so good as amend all inaccuracies in the writing which you may find it. If not I hum-

ibly submit myself to your superior judgement. Be assured, however, that I am, Sir, the constant admirer of your writings and publications.

G. R. H.

*P. S.* Although I have once or twice called them young adders in this letter, yet I am no way confirmed in my opinion that they really are so. Their order of marching makes me think they were not maggots; and it is not agreeable with the natural history of the viper to suppose they increase so fast; I shall therefore wait for your opinion of them, which will be gratefully received. I have mentioned all the particulars I observed about them\*.

\* Along with the above was received by the Editor in a separate paper, several dried small animals, to appearance. One end was clearly distinguishable from the other, by a small black dot, which is supposed to be the head, the rest was so much shrivelled up in the drying as not to be distinguishable.

The phenomenon here described is certainly very uncommon, and deserves the attention of the curious. That it was a nest of young vipers, as the writer evidently suspected, seems not to be very probable. The viper is known to be a viviparous animal, and produces its young nearly in the common way, in as far as I have been able to learn. I never myself had an opportunity of making any observations on the common adder, but a gentleman to whom I shewed the above, assured me, he had seen four or five young ones, about three inches long, and perfectly active, taken out of the body of an adder that was killed.

It is probable some of my country readers may have had opportunities of observing the adder while with young, in various degrees of advancement; and it is also possible that some of them may have remarked the same appearance that has been described by this correspondent, and may be able to throw some light upon it. Any elucidations on this head will be very acceptable.

Fishes that are generated from spawn, are, I believe, the most productive of all animals; and these sometimes attach themselves to one another, when young, very closely in shoals, somewhat resembling the phenomena

## DISCOVERIES IN THE INTERIOR PARTS OF AFRICA.

THE association instituted for promoting discoveries in the interior parts of Africa, of whose labours some accounts were given in the Bee, vol. i. p. 15 and 95, continue with unremitting ardour in their pursuits; and have lately printed, for the use of the subscribers only, an account of a continuation of their discove-

here described. I had once occasion to observe a circumstance of this sort myself, respecting eels, which being curious, and nothing of the same sort taken notice of in any natural history of that animal I have seen, I shall briefly state for the satisfaction of the reader.

## MIGRATION OF EELS.

Having occasion to be once on a visit at a friend's house on Dee-side in Aberdeenshire, I often delighted to walk by the banks of the river to mark the phenomena that occurred. I soon observed something like a long black string moving along the edge of the river in shoal water. Upon closer inspection I discovered that this was a shoal of young eels, so closely joined together, as to appear, on a superficial view, one continued body, moving briskly up against the stream. To avoid the retardment they experienced from the force of the current they kept close along the water's edge the whole way, following all the bendings and sinuosities of the river. Where they were employed, and in still water, the shoal diluted in breadth, so as to be sometimes near a foot broad, but when they turned a cape, where the current was strong, they were forced to occupy less space, and press close to the shore, struggling very hard till they passed it.

This shoal continued to move on without interruption night and day for several weeks. Their progress might be at the rate of about one mile in the hour. It was easy to catch as many of the animals as you pleased, though they were very active and nimble. They were eels perfectly formed in every respect, but not exceeding two inches in length. I conceive that the shoal did not contain, on an average, less than from twelve to twenty in breadth, so that the number that passed, on the whole, during their progress, must have been very great. Whence they came or whether they went I know not. The place I remarked them at was six miles from the sea. And I am told the same phenomenon takes place there every year about the same season.

Edit.

ries since the former publication; with a sight of which the Editor having been favoured, he makes haste to lay before his readers an abstract of the important discoveries it contains.

It seems perfectly astonishing that Africa, the northern parts of which are almost at our very door, should have remained for so many centuries so totally unknown to the natives of Europe. It now appears that the vast tract of country which lies behind the kingdom of Morocco, that has hitherto been deemed a sterl and inhospitable desart, which geographers had no other way of delineating but by inserting figures of elephants, and other wild beasts, in their maps, is, in many places, a rich and fertile country, abounding with people who are no strangers to industry and arts, and considerably advanced in civilization and refinement of manners.

By the former publication of this society, the public were made acquainted with the singular conformation of that extensive district in the northern parts of Africa, which hath hitherto been denominated Zaara, or the desert, which exhibits appearances not more novel to the naturalist than interesting to the philosopher. It may be called a vast sea of sand, having islands interspersed through it, which abound with the richest productions of the vegetable kingdom, and are inhabited by various tribes of people in different degrees of civilization, and carrying on with each other an expensive and precarious traffic, not by means of ships, but by caravans of camels, which are sometimes overwhelmed in billows of sand, and sunk into endless oblivion.

Beyond this district, which is only habitable in those spots where springs abound on the surface, and where of course the sands are either entirely interrupted, or of small depth, and which we have compared to islands, it now appears, that another district, consisting of firmer materials, begins in which mountains arise in various directions, that produce rivers of great magnitude, which not only add fertility to the country, but facilitate the commerce of those numerous tribes of people who inhabit their borders. This fertile zone, besides smaller streams, is watered by the Senegal, the Gambia, the Niger, and the Nile. Part of this district forms the subject of the present publication ; and the discoveries respecting it are already great and highly interesting ; but hitherto only a small part of it has been imperfectly explored. The internal parts of that immense tract of country, which extends from the Niger southward to Cafraria, remains yet to be investigated, and will furnish many future memoirs from a society which promises to add much more to the sum total of human knowledge, than was expected when it was first instituted. May they continue steady in their pursuits, and be as fortunate as they hitherto have been, in finding men calculated for engaging in the arduous task of discovery !

The public have already heard some surmises of the existence of a large town on the banks of the Niger, called Houfsa, which seemed to be so wonderful, and it appeared so impossible that a place of such magnitude as it was represented to be, could have so long been totally unknown in Europe, if

such a place there had been, that its existence was doubted by many. It now appears undeniable that such a place does actually exist. The circumstances that have led to this conclusion, and the steps that have been taken for extending our discoveries still farther in Africa, will be learnt from the following abstract of the publication of the society, which shall be given, as much as our limits will admit, in the words of the ingenious compiler of this account.

An Arab called Shabeni had, two years ago, given to the society an account of an empire on the banks of the Niger, which strongly attracted the attention of the society. He said 'that the population of Houssa, its capital, where he resided two years, was equalled only (as far as his knowledge extended) by that of London and Cairo: and in his rude unlettered way, he described the government as monarchical, yet not unlimited; its justice as severe, but directed by written laws; and the rights of landed property as guarded by the institution of certain hereditary officers, whose functions appear to be similar to those of the *Canongoes* of Hindostan, and whose important and complicated duties imply an unusual degree of civilization and refinement.

' For the probity of their merchants, he expressed the highest respect; but remarked, with indignation, that the women were admitted into society, and that the honour of the husband was often insecure.

' Of their written alphabet he knew no more than that it was perfectly different from the Arabic and the Hebrew characters; but he described the art of writing as common in Houssa. And when he acted

the manner in which their pottery is made, he gave, unknowingly to himself, a representation of the Grecian wheel.

‘ In passing from Houssa to Tombuctoo, in which last city he resided seven years, he found the banks of the Niger more numerously peopled than those of the Nile, from Alexandria to Cairo ; and his mind was obviously impressed with higher ideas of the wealth and grandeur of the empire of Houssa, than those of any other kingdom he had seen, England alone excepted.

‘ The existence of the city of Houssa, and the empire thus described by Shabeni, was strongly confirmed by the letters which the committee received from his majesty’s consuls at Tunis and Morocco, and with this additional circumstance of information from them, that both at Tunis and Morocco, the eunuchs of the seraglio were brought from the city of Houssa.

‘ Anxious to investigate the truth of these accounts, and impatient to explore the origin a course of a river that might possibly open to Britain a commercial passage to rich and populous nations; the committee embraced the proposals which the ardour of a new missionary offered to their acceptance. For major Houghton, who was formerly a captain in the 69th regiment, and in the year 1779 had acted under general Rooke as fort major, in the island of Goree, expressed his willingness to undertake the execution of a plan, which he heard they had formed, of penetrating to the Niger by the way of the Gambia;

‘ His instructions, accordingly, were to ascertain the course, and, if possible, the rise and termination of that mysterious river ; and after visiting the cities of Tombuctoo and Houssa, to return by the way of the desert, or by any other route which the circumstances of his situation at the time should recommend to his choice.’

This new missionary is thus characterized in a succeeding part of this publication. ‘ The obstacles he has surmounted, and the dangers he has escaped, appear to have made but little impression on his mind ; a natural intrepidity of character, that seems inaccessible to fear, and an easy flow of constitutional good humour, that even the roughest accidents of life have no power to subdue, have formed him, in a peculiar degree, for the adventure in which he is engaged : and such is the darkness of his complexion, that he scarcely differs in appearance from the Moors of Barbary, whose dress in travelling he intended to assume.’

This adventurous traveller left England on the 16th October 1790. He arrived at the entrance of the Gambia on the 10th of November, and was kindly received by the king of Barra, who remembered the visit the major had formerly paid to him from the island of Goree ; and who now, in return for a small present of the value of L. 20, cheerfully tendered protection and assistance as far as his dominions or influence extended.

He proceeded up the river to Juniconda, where he purchased a horse to go by land to Medina, the ca-

pital of Woolli, where he was kindly and hospitably received.

‘ The town of Medina,’ he says, ‘ is situated at the distance of about 900 miles, by water, from the entrance of the Gambia ; and the country adjacent abounds with corn and cattle ; and, generally speaking, in all things that are requisite for the support, or essential to the comfort of life.’

In a letter from this place to his wife, major Houghton, ‘ delighted with the healthiness of the country, the abundance of the game, the security with which he made his excursions on horseback, and above all, with the advantages that would attend the erection of a fort on the salubrious and beautiful hill of Fatetenda, here the English once had a factory, he expresses his earnest hope that his wife will hereafter accompany him to a place, in which an income of ten pounds a year will support them in affluence ; and that she will participate with him in the pleasure of rapidly acquiring that vast wealth which he imagines its commerce will afford.’

His prospects however were, for the present, suddenly blasted. A fire consumed almost all his treasures, together with a great part of the town. His interpreter ran off with his cavalry,—a trade gun which he had purchased in the river, burst in his hand, and wounded him severely,—yet not succumbing, he proceeded for Bambouk, in company with a slave merchant, ‘ on the eighth of May, by moonlight, and on foot, with two ases, which the servant of the slave merchant offered to drive with his own, and which carried the wreck of his for-

tune ; and journeying by a north-east course, arrived on the fifth day at the uninhabited frontier which separates the kingdoms of Woolli and Bondou.

‘ He had now passed the former limit of European discovery, and while he remarks with pleasure the numerous and extensive population of this unvisited country, he observed that the long black hair, and copper complexion of the inhabitants announce their Arab origin.’

After a journey of 150 miles, he reached the banks of the Falemé, the south-western boundary of the kingdom of Bambouk. Its stream was exhausted by the advanced state of the dry season, and its bed exhibited an appearance of slate intermixed with gravel.

‘ Bambouk is inhabited by a nation whose woolly hair and sable complexions bespeak them of the negro race, but whose character seems to be varied in proportion as the country rises from the plains of its western division to the high lands on the east. Distinguished into sects, like the people of Woolli and Bondou, by different tenets, of Mahomedans and Deists, they are equally at peace with each other, and mutually tolerate the respective opinions they condemn.

‘ Agriculture and pasturage, as in the negro states on the coast of the Atlantic, are their chief occupations ; but the progress which they have made in the manufacturing arts is such as enables them to smelt their iron ore, and to furnish the several instruments of husbandry and war ; cloth of cotton on the other hand, which on this part of Africa seems

to be the universal wear, they appear to weave, by a difficult and laborious process.'

The common food of the people is rice. They make a kind of fermented liquor from honey.

He was here pillaged of a great part of his small remaining stores by the king of Bondou, who had just terminated a successful war, by which he acquired a considerable part of the dominions of the king of Bambouk. This calamity the latter ascribed to the French, with whom he traded from Senegal, having neglected to supply him with gunpowder and military stores; while the English with whom his enemy dealt, had been regularly supplied with those articles from the Gambia.

He afterwards proceeded with great difficulty to Ferbanna the capital of the kingdom of Bombouk, situated on the eastern side of the Serra Coles, or river of gold, where he was kindly entertained. He there made an agreement with a respectable merchant of Bambouk, who offered to conduct him on horseback to Tombuctoo, and to attend him back to the Gambia. The king gave him at parting, as a mark of his esteem, and a pledge of future friendship, a present of a purse of gold.

‘ With an account of these preparations the major closes his dispatch of the 14th of July; and as the society are informed by a letter from Dr Laidley, his correspondent on the Gambia, that on the 22d of December no later advices had been received, there seems the strongest reason to believe that the major descended the eastern hills of Bambouk, and proceeded on his road to Tombuctoo.’

Such are the outlines of this interesting journal. The elegant writer of this publication thus remarks on the information obtained from him :

‘ The journey of major Houghton from the Gambia to the kingdom of Bambouk, has enlarged the limits of European discovery ; for the intermediate kingdom of Bondou was undescribed by geographers : and the information he has obtained from the king of Bambouk, as well as from the native merchants with whom he conversed, has not only determined the course, and shewn, in a great degree, the origin of the Niger ; but has furnished the names of the principal cities erected on its banks ; fortunately, too, the accounts which he has thus transmitted, are strongly confirmed by the intelligence which his majesty’s consul at Tunis has collected from the Barbary merchants, who trade to the cities of Tombuctoo and Houfsa, and whose commercial connections extend to the highest navigable parts of the Niger. Nor is this the only advantage for which the committee are indebted to the public spirit and indefatigable zeal of consul Magra ; for the specimens of the vegetable productions of the countries on the south of the desert, which the acquaintance he has cultivated with the conductors of the caravans has enabled him to send to the committee, afford a satisfactory proof that the account which their printed narrative, on the authority of Shereef Imhammed, has given of several of those productions, is faithful to the objects it describes. And the relation he has transmitted of the routes from Tunis to Ghedesmes, and from thence to Cashna and Tombuctoo, have fur-

nished important materials for elucidating the geography of the desert.

‘ But though we have now assurance that the Niger has its rise in a chain of mountains which bound the eastern side of the kingdom of Bambouk, and that it takes its course in a *contrary* direction from that of the Senegal and the Gambia, which flow on the opposite side of the same ridge, yet the place of its final destination is still unknown ; for whether it reaches the ocean, or is lost, as several of the rivers of mount Atlas are, in the immensity of the desert ; or whether, like the streams of the Caspian, it terminates in a vast inland sea, are questions on which there hangs an impenetrable cloud.

‘ From a passage in Eschylus, in which Prometheus relates to Io the story of her future wanderings, there is reason to believe that some of the ancients imagined the river Niger to be the southern branch of the Egyptian Nile, which others represented as rising in the hills, to which they gave the fanciful name of the mountains of the Moon. The passage from Eschylus, as translated by Potter, is expressed in the following words :

“ —— Avoid the Arimaspians troops.  
—— Approach them not, but seek  
A land far distant, where the tawny race  
Dwell near the fountains of the sun, and where  
The Nigris pours his dusky waters ; wind  
Along his banks till thou shalt reach the fall,  
Where, from the mountains with papyrus crown'd,  
The venerable Nile impetuous pours  
His headlong torrent ; he shall guide thy steps  
To those irriguous plains, whose triple sides  
His arms surround ; there have the fates decreed  
Thee and thy sons to form the lengthen'd line.”

‘ The accounts received by the committee, of the probable facility of opening a trade from great Britain to the various cities on the Niger, encourage a belief that the inland regions of Africa may soon be united with Europe in that great bond of commercial fellowship which the mutual wants and different productions of the other continents of the globe have happily established. Much, undoubtedly, we shall have to communicate, and something we may have to learn: for the merchants of Barbary assert that the people of Houfsa have the art of tempering their iron with more than European skill; and that their files in particular are much superior to those of Great Britain and France.

‘ To what degrees of refinement the unmeasured length of successive generations may have improved their manufactures; or to what arts, unknown and unimagined in Europe, their ample experience may have given rise, the next dispatches from major Houghton may probably disclose. That in some of these insulated empires the knowledge and the language of ancient Egypt may still imperfectly survive, is not an unpleasing supposition: nor is it absolutely impossible that the Carthaginians, who do not appear to have perished with their cities, may have retired to the southern parts of Africa; and, though lost to the world in the vast oblivion of the desert, may have carried with them to the new regions they occupy, some portion of those arts and sciences, and of that commercial knowledge, for which the inhabitants of Carthage were once so eminently famed.’

## MORAL REFLECTIONS.

*To the Editor of the Bee, by Mira.*

THERE is a point beyond which the human mind cannot suffer, and there are also bounds, beyond which human calamity cannot extend. Reflect, my beloved friend, with humble gratitude ; reflect how far you are yet from reaching the verge of that frightful gulph. Reason, religion, friendship, and conscious rectitude, are yours ; open your heart to those consolations which these supply ; and above all, let the consideration of the shortness of life mitigate the severity of its sufferings, and the assured hope of that which is to come, teach you to rise superior to them ; seek relief from that Being, who, in times of extremity, often brings us un hoped deliverance, and is alike powerful and willing to assist those who put their trust in his aid. It is by awful dispensations, and in hours of peculiar darkness, that the Almighty teaches his feeble creatures, to raise their eyes from second causes, and what they call fortuitous events, to Him, the *great first Cause* and *supreme Governor* of the universe. It is then their virtues are made perfect by discipline,—that their faith triumphs over the world : it is then the most enlightened of the human race are brought to a feeling sense of their own ignorance, that with humility they adore what they cannot comprehend, and cry out, Man is error and ignorance ! Being of beings have mercy upon us !

Ah why has heaven condemn'd me to sustain  
This grief, for ills I never can relieve ;  
Why must I only weep the wretches' pain,  
Prove the warm wish, yet want the pow'r to give ;

Why mark true merit immaturely fade,  
 Uncherished, unprotected and unknown;  
 Lost in obscurity's remotest shade,  
 The buds of genius blasted soon as blown!  
 Why must I see unpitied, unredress'd,  
 The cruel injuries of wanton pow'r;  
 Forc'd to conceal the anguish of my breast,  
 Denied to succour whom I most deplore!  
 Yet heaven can witness I ne'er wish'd for wealth,  
 Nor the gay follies of a foreign land;  
 Ne'er sacrific'd to pleasure, peace and health,  
 Nor indolence preferr'd to useful toil;  
 Mine was the wish, far from the world to plan  
 The moral tale, instructive of my kind;  
 To point the best pursuits of social man,  
 And form by stealth the uncorrupted mind;  
 Unnotic'd to convey the prompt supply,  
 To cheer dull poverty's obscure abode;  
 To read the language of the grateful eye,  
 Catch the warm praise, and point as due to God;  
 Of youth the kind affections to engage,  
 To nourish tender infancy with bread;  
 With kind compassion cherish feeble age,  
 And give the cordial which I yet may need.  
 Yet say is happiness to wealth allied,  
 Had Heaven so will'd, it ne'er had been assign'd,  
 To gratify the wish of pamper'd pride,  
 Or work the purpose of th' invidious mind.  
 Hence-vain complaints; hence and be heard no more.  
 Heaven's wond'rous plan, to Heav'n is only known;  
 Perhaps endow'd with affluence and pow'r,  
 That insolence I hate had been my own;  
 With pleasure circled, and secure from fear,  
 Perhaps a stranger to each softer tie;  
 I ne'er had known compassion's cordial tear,  
 The thousand cordial sweets of sympathy.  
 Though wealth by providence has been deny'd,  
 Fair is my lot, no niggard bliss is mine;  
 For I can heal the wounds of honest pride,  
 And teach revenge its purpose to resign;  
 Can cherish modest merit with applause,  
 With kindness soothe the apprehensive mind;  
 Can plead with boldness virtue's injur'd cause,  
 Or hide the frailties of my feeble kind:  
 And oft the anguish of the bursting heart,  
 The gentle voice of friendship will restrain;  
 A mite to indigence will joy impart,  
 A pitying sigh, some respite give to pain,  
 A cheerful tale deceive the weight of years,  
 A doubtful hope, the trembling tear suspend,  
 A welcome look dispell a lover's fears.  
 A simple sonnet please a partial friend.

And these are mine, now I these gifts dispise,  
 Eternal power, to whom each gift I owe,  
 With-hold even from my prayers the means of vice,  
 Nor let my wish fulfill'd procure my woe.

MIRA.

## TAK TENT AND BE WARY.

A SCOTS SONG NEVER PUBLISHED BEFORE.

I.

‘ HEEH ! lafs, but you’re canty and vogie !  
 ‘ Wow but your een look pawky and rogatie !  
 ‘ What was ye dooing in yonder green bogie,  
   ‘ Up in this morning sae airy and grey ?’  
 ‘ I’ve been wi’ someboddie,—what need ye to speer ?  
 ‘ I’ve been wi’ young Jamie,—I’ve been wi’ my dear !’  
 ‘ God save me ! my mither will miss me, I fear :  
   ‘ D’ye ken lafs he’s courting me a’ the lang day !’

II.

‘ O Kate I tak tent’ and be warie ;  
 ‘ Jamie’s a sad ane ! he never will marry :  
 ‘ Think o’ poor Tibby !—he’s left her to carry  
   ‘ Black burning shame till the day that she die !’  
 ‘ I carena for Tibby,—a glaiket young quean !  
 ‘ Her gaits wi’ the fallows, we a’ ken lang syne ;  
 ‘ The heart o’ my laddie I never can tyne,  
   ‘ He promis’d to marry me down on yon lea !

III.

‘ O no ! I need nae be warie ;  
 ‘ Yes, yes ! he means for to marry ;  
 ‘ Wi’ mony sweet kisses he ca’d me his dearie,  
   ‘ And swore he wad tak me before beltan day !’  
 ‘ O Kate, Kate ! he’ll deceive ye,  
 ‘ (The deil’s in the cheil ! he does naithing but grieve me,)’  
 ‘ He’s fu’ o’ deceit, gin ye like to believe me,  
   ‘ The fause loon last night said the same thing to me.’

IV.

‘ Dear Jean but you’re unco camstrarie,  
 ‘ Ye’ll ne’er let a boddie trou ever they’ll marry ;  
 ‘ Ye’ve now gi’en me something that’s no light to carry ;  
   ‘ Twill lie at my heart till the day that I die !’  
 She gaid awa sighing,—she gaid awa wae ;  
 Her mither flet sare, for her biding away ;  
 She sat down to spin,—ne’er a word could she say,  
   But drew out a thread wi’ the tear in her ee !

V.

‘ O yes ! ’tis time to be warie ;  
 ‘ Jamie’s a sad ane,—he never will marry ;  
 ‘ He may rise in the morning, and wait till he’s weary,  
   ‘ He’s no see my face this year and a day.’

She raise wi' the lav'rock,—she milked her cow;  
 She sat down by her leglin, and 'gan for to rue;  
 Young Jamie came by,—her heart lap to her mou,  
 And she trow'd ilka word that the fause loon did say.

O dear how lasses will vary!  
 Sometimes they're doubtfu', 'tis then they are warie;  
 But when ' love comes louping,' they ay think we'll marry,  
 And trust like poor Kate to what fause lemons will say.

## POMPEY'S GHOST.

I.

From perfect and unclouded day,  
 From joys complete without alloy,  
 And from a spring without decay,  
 I came by Cynthia's borrow'd beams,  
 To visit my Cornelia's dreams,  
 And bring them still sublimer themes.

II.

I am the man you lov'd before  
 These streams had wash'd away my gore,  
 And Pompey now shall bleed no more;  
 Nor shall my vengeance be withheld,  
 Nor unattended by a flood  
 Of Roman and Egyptian blood.

III.

Cæsar, himself, it shall pursue,  
 His days shall troubled be, and few,  
 And he shall fall by treason too;  
 He, by a justice all-divine,  
 Shall fall a victim at my shrine;  
 As I was his he shall be mine.

IV.

Thy troubled life regret no more,  
 For fate will waft thee soon ashore,  
 And to thy Pompey thee resole;  
 Where guilty heads no crowns shall wear,  
 Nor my Cornelia shed a tear,  
 Nor Cæsar be dictator there.

AN ENQUIRY INTO THE EFFECT THAT THE SALT LAWS PRODUCE  
ON THE REVENUE IN SCOTLAND.

HAVING showed, Bee vol. viii. p. 150 & 192, and vol. x. p. 297, to what an intolerable degree the salt laws operate in retarding the industry of the people of Scotland, I shall now proceed to enquire in what manner they affect the national revenue.

The total net produce of salt duties in Scotland, according to Sir John Sinclair's account of the revenue, appears to be for the whole of Scotland, anno 1789 \*, L. 9293 : 10 : 1 $\frac{1}{2}$ .

By the third report of the committee of parliament, on fisheries, it appears, that in the counties of Argyll, Inverness, Sutherland, Caithness, Orkney, Shetland, Nairn, and Cromarty, the account of customs stood thus, for the average of ten years preceding 1784.

Gross annual produce, - - - - -	L. 5073 12 0
Expence of collecting, including custom- house cruizers for that part of the is- land, - - - - -	10,105 10 11

Payments exceed the produce †, - L. 5031 18 11

So that government pays nearly twice as much as it draws in these counties, on the single branch of customs; and a defalcation of revenue to the amount of more than five thousand pounds a-year is incurred. The excise account is little different.

But this is not the whole of the loss incurred by the revenue on account of the salt laws. Because of these

\* History of public revenue, part iii, p. 344.

† Account of the present state of the Hebrides, Introduction, p. 65.

laws, it has been shown, that the fisheries among the islands, and the trade in fish, has been entirely precluded; and in order to have any fisheries at all, government has been obliged to grant bounties for vessels fishing for herrings, and a debenture on the exportation of these from Britain; neither of which would have been necessary had the trade in salt and fish been perfectly free. These two drains from the revenue must therefore be deducted. This account on an average of years preceding 1783, stands thus :

Bounties paid on busses in Scotland *, -	L. 14,082	15	0
Premiums on exportation †, - - -	6051	11	10
To which must be added, premiums for			
Scotch herrings, and hard fish exported			
from England, supposed to be about,	2000	0	0
Add also the annual loss on the customs,			
as above, - - - - -	5031	18	11
Add farther the premiums granted by the			
society for encouraging fisheries in			
Scotland, at least, <i>per annum</i> , - - -	2000	0	0
Total outgivings, - - - - -	29,166	5	9
From that deduct the net proceeds of			
the salt duties, - - - - -	9293	10	1

Outgoings exceed the incomings, - L. 19,872 15 8

So that the revenue sustains a clear annual loss of nearly twenty thousand pounds a-year.

This, however, is only a small part of the loss; for when the matter is fairly investigated, we ought to advert, not only to the net loss that is annually sustained; but to that ought to be added the net revenue which would accrue to the state, were these people put into such a situation as

\* See third report of the committee of fisheries, Appendix, No. 4.

† Ibid.

to enable them to be in as prosperous circumstances as other parts of the country, so as to pay taxes in an equal proportion.

There are at least 500,000 inhabitants in those counties of Scotland above enumerated, who, instead of paying taxes to the exchequer, actually draw a considerable sum from it.

Suppose that in the whole of England, and the remaining parts of Scotland, there are eight millions of people.

These eight millions of people yield at present a free revenue of more than sixteen millions to the exchequer.

Of course, at the same rate, this half million ought, if they were in equally prosperous circumstances, to pay one million of free taxes into the exchequer.

At this rate it is obvious that government loses an annual revenue of about L. 1,030,000 for the sake of obtaining an annual income of less than L. 10,000 only. Can any conduct be more irrational, were humanity entirely out of the question !!

Neither is this the whole of the loss that revenue sustains. If the same system be persisted in, emigrations from these countries must continue to increase ; the number of people there must annually diminish ; and with it, the present strength of the country be impaired, and its future resources be cut off.

But should this oppressive system of legislation be abandoned, and the people put into easy circumstances, their numbers would rapidly increase. In a short time, instead of a half, there would be a whole million of inhabitants, yielding a revenue of at least two millions, which might soon increase to a degree that no person can at present form an idea of.

Let us not think that these ideas are chimerical. Spain, in the time of Augustus, contained fifty millions of

people. In consequence of a succession of absurdities in their system of legislation, they are diminished now to ~~weight~~. And, by an opposite management, the United Provinces, which, at the first mentioned period, contained not perhaps two thousand inhabitants, contain now more than two millions.

Some will object to the possibility of ever sustaining a numerous population in the Highlands and Isles of Scotland. The soil, they will tell you, is poor, and the climate unfavourable; it is therefore in vain to hope that this part of the country can ever become populous or wealthy. Those, however, who argue thus, do not seem to be sufficiently aware of what can be effected by man, when under a rational and mild system of government. Countries much more destitute of resources, under the vivifying influence of a wise system of legislation, have become much more populous than the most fertile kingdoms in Europe. "The canton of Appenzel," says Mr Robert in his *Voyage dans les XIII. cantons Suisses*, p. 229, "a small district, part of which is occupied by glacières, inaccessible rocks, ravines, and precipices, offers a population of fifty-five thousand inhabitants, which, in proportion to its extent, greatly surpasses the most fertile countries. The canton of Appenzel contains seventeen hundred inhabitants for every square league; neither the rich plains of the Milanese, nor the most fertile provinces of France, nor even the United Provinces, vivified by an immense commerce, does present such a population."

"I had seen," says he with surprise, "the multitude of habitations scattered along the mountains, on approaching towards St Gall; my astonishment redoubled, and was carried to the highest possible pitch, when I entered into the canton of Appenzel. In places which are not susceptible of any culture, in an immense valley, where they neither gather wheat, nor wine, nor legumes, nor barley, nor

rye, nor oats, nor fruits ; where the soil neither produces hemp, nor flax, nor oil, not even potatoes ; in these wild places which nature had devoted to solitude and desertion, what a prodigy is it to see the mountains covered, even to the top, with houses which seem to form a continued village without bounds ! so near do they approach to each other.

“ Appenzel, itself, which, considering the nature of the country, and its position, ought only to present a few straggling and miserable hamlets, is a beautiful burgh, the greatest part of the houses in which are painted, and whose inhabitants live at their ease.

“ This magnificent burgh seems to be separated from the rest of the universe. Nature has shut up the avenues to it. The communication is such that it can only be approached by means of wooden stairs fixed to the rock. Nevertheless, independent of a numerous population, the inhabitants are well clothed, well fed, and the inns well served.”

Will any one who knows the Highlands of Scotland pretend to say, that it does not possefs natural advantages infinitely beyond what the canton of Appenzel enjoys ? Yet if freedom and judicious laws have been sufficient to clothe these barren and inacessible hills with habitations, and to make the people live there in chearful affluence, what might not a small share of the same political wisdom effect in the last ;—with the poet we may well say of this,

That all is the gift of industry.

But if government shall bind the hands of the vigorous, and thus dry up the very sources of affluence, is it possible to avoid execrating the power that is exerted, not to encourage industry, but to repress it ;—not to protect the people, but to annoy them ;—not to invite inhabitants to add to our population, our strength, and our wealth, but to

compel our people to fly from these inhospitable shores, and to seek that support among a foreign nation, that their own unwise legislators have thought it was not worth their while to afford them? I have no desire to promote national disgust; but it is impossible for me ever to contemplate this subject, without experiencing an indignant feeling that overcomes every other consideration.

Let not those who observe the present prosperity of Britain in other respects, turn their eyes from this disagreeable scene with contempt, or think it unworthy of their notice. The progress of depopulation, when it once begins, is rapid beyond what can be conceived; and extends its influence much farther than any person will easily believe. Spain, when in the plenitude of her power; when her empire embraced half the globe, and her arms made all the nations tremble; Spain, at that moment, intoxicated with pride, and despising the dictates of reason, drove from her realms at once about a million and a half of her industrious people! In vain did men of sense point out the consequences to government; these *lower* people were beneath their attention; but with the loss of these people, the business of those which remained was prodigiously slackened, their wealth of course was diminished. The taxes they formerly paid with ease, fell short of the usual sum; new burdens must be imposed; which not being paid with ease, gave room for fiscal oppression\*. Foreign conquests then opened a door for de-

\* Dr Franklin, Dr Price, and some others, have endeavoured to make the people in Britain think lightly of the consequences of depopulation; but the necessary effects of decreasing the number of the people, by diminishing the industry of all who remain, as briefly mentioned above, are distinctly specified in a dissertation by the Editor, (See account of the Hebrides, Introduction p. 114,) which having been sent to Dr Price, he candidly acknowledged he had written upon that subject too hastily, and now was satisfied he had been wrong.

structive enterprises ; the population of Spain has gradually diminished from twenty-five to less than eight millions of people \*. That country, which was once a paradise, is now a desert † ; and the pittance of money that the crown can squeeze from a depressed people, by forced and injudicious taxes, affords to it a revenue of not one-tenth of the sum it might now have enjoyed, had wisdom directed the councils of the nation, at the time that their phrenzy made them believe that the loss of a few of their poor people was of little consequence.

\* The twenty-five millions of people here mentioned, respects the time of Philip II. of Spain. From the time of Augustus, till that last period, the conquest of Spain by the Goths and the Moors, and the continual wars carried on in that kingdom, had diminished the population from fifty to twenty-eight millions.

† On few subjects do mankind in general judge more fallaciously than in what respects the fertility of countries, or their capability of sustaining a great number of people. Places that at present produce next to nothing, not even for the sustenance of domestic animals, may be made by human industry, where a numerous people are collected together, to produce in a short time as abundant crops as can be found in any part of the globe. There are many and extensive fields in the neighbourhood of Aberdeen, whose whole produce, only a few years ago, was not worth sixpence an acre, that now afford the most abundant crops, and let from three to six pounds an acre, of rent. This is an undeniable proof of the power of fertilizing a country, by means of concentrated population.

It is more wonderful still that land, which has been by human industry rendered fertile and productive, should, by the absence of man, and the slackening of his industry, become once more barren and steril as at first. The land of Palestine that once supported such a number of people, as must have covered even its hills with habitations, is now so completely barren, that not a hundredth part of its then population, can find a scanty subsistence from its ungracious soil.

In like manner, Spain, which by all ancient authors has been celebrated for its amazing fertility, and which, while it contained a population in itself, alone, of fifty millions of people, easily found subsistence, and to spare, for immense foreign armies ; now that its people are dwindled to eight millions, it has lost its fertility in a yet higher degree ; so that these

If then depopulation be the necessary consequence of injudicious laws ; and if national debility, and fiscal poverty, be the unavoidable consequences of depopulation, even in the most fertile countries : if, on the other hand, a strict attention to guard the interests of the people, will, alone, be sufficient to clothe with hamlets the most inhospitable desert, and to diffuse wealth and happiness among a numerous people,—irresistible national strength, and an abundant fiscal revenue, must be the natural and unavoidable consequences ; as the examples I have produced clearly show.

Is it possible for administration to turn their minds to any subject that is more deserving their maturest consideration, than that which I now so strenuously recommend to their notice ? Now is the time to do it *with effect*. What proposition can be more plain, than that revenue is the offspring of population and wealth ? and that of course every law which tends to diminish the number of the people, or to retard their acquisition of wealth, necessarily dries up the sources of fiscal revenue ? Nothing sure can be more plain ; yet from the inattention that is bestowed upon this subject, by men in the executive departments of government, and by those who are not in it, eight millions, though poorly fed, are obliged to have recourse to foreign countries, to which heaven, as they would say, had been pleased to grant a more fertile soil, for a supply of food. Such is the influence of MAN in this universe, that when free to exercise his natural faculties, and protected from the depredations of others, he can even create, as it were, a new earth for himself, make the most barren soil abundantly to supply his wants, and the most inhospitable climate become subservient to his will. It is not soil or climate, but liberty and protection alone, which can ever produce abundance. Let not, therefore, a country be abandoned, because it is now considered as barren. Let us not fear that ever provisions will fail, where the hands of man are free, and where his industry is not checked by injudicious laws.

it would seem that neither of them are able to comprehend the force of this plain mode of reasoning.

I have often said, nor can it be too often repeated, that the Highlands and Islands of Scotland offer natural sources of population, manufactures, and trade, and consequently revenue, that no other part of the British dominions can ever equal ; and a time will no doubt come, when the nation will avail itself of these natural advantages ; but how long it may be before this takes place, no one can tell. Many ages had elapsed before the Gre- cian Archipelago, from advantages similar in kind, though greatly inferior in degree, came to be the wonder of the universe. Innumerable harbours in the Highlands, and Isles which have no bar but those that ill judged laws create, offer a facility of intercourse between every part of the country and another, and with all the world, that are known no where else. Level straths lead from these harbours into the very heart of the country, in some places across the whole island, that offer an unequalled facility of intercourse by land. Inexhaustible streams of water, which, from the amazing height of fall, would, under proper management, have a power over machinery, next to infinite, would give to manufactures there, an unrivalled advantage over all others. The sterility of the country is nothing ; it is more fertile than Appenzel, more easily preserved from the destructive ravages of the elements than Holland ; and were a free intercourse permitted by the laws, in coal and in grain \*, it would become a sure market for the produce of some of the more fertile districts in Britain, which are better calculated for

\* Not only are the salt laws oppressive,—many others are equally injurious. Among others, by the late corn act, it is in the power of any customhouse officer stationed there, to starve nearly half a million of people for want of food, almost when he pleases !

agriculture than manufactures. Halifax, Wakefield, and Leeds, enjoy only a few of the advantages that the countries I now describe possess in perfection ; and the influence of these markets is felt for hundreds of miles around them. It is those alone who have seen and compared the natural capabilities of the two countries, who can form an idea of the infinite disproportion that subsists between them ; yet it is this country which nature has formed, as it were, with the sole view of showing to what an astonishing degree of perfection manufactures and trade may be carried. It is this very country our short sighted politicians despise, and by laws which nothing but ignorance could dictate, and insanity continue, is rendered a dreary solitude. The people, by artificial restraints, are deprived of the very means of subsistence, and driven in despair to seek for refuge elsewhere. While the heart bleeds for individual distress thus produced, it is impossible to say whether contempt for the folly, or indignation at the atrocity of such proceedings should prevail. It is clear, however, that the minister who passively and inadvertently permits these things to be done, is far less to blame than those are, who, seeing these great evils, are at no pains to develope to the minister and the nation at large, the alarming consequences of not affording timely redress of such intolerable grievances.

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#### NOTICES OF IMPROVEMENTS NOW GOING ON IN INDIA.

THE benefits that would result to the community from a free correspondence carried on upon liberal principles, are inconceivably great. This is made particularly evident by the perusal of Dr Anderson's correspondence in India, the continuation of which I received by the

Raymond late from Madras. In every page of that correspondence, new facts are discovered, and striking views of improvements suggested. The culture of the silk worm, over a very extensive tract of country, is already in a great measure effected. And the opuntia is now reared in such abundance, as to afford no room to doubt, that when the cochineal insect arrives, it will soon become a general object of culture. Besides the white lac already mentioned, many other useful productions, by Dr Anderson's influence, have been brought to Madras from China, Sumatra, and the other islands in the Indian ocean. And in these researches, many valuable plants have been discovered that never were suspected to be there, particularly the bread-fruit tree, which was supposed to be found no where else on the globe but in the South Sea islands. The general spirit with which these enquiries are now carrying on in India, will appear from the following letters, which I willingly insert, from a full conviction that they will afford much pleasure to every well disposed mind.

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SIR, *Mr R. Clerk dep. sec. to Dr James Anderson.*

THE supercargoes at Canton, having, in consequence of an application made by this government at your recommendation, sent here, in the ship General Abercrombie, eight boxes containing 200 tallow trees, and 200 lacquer trees. I am directed to acquaint you that the commander will be directed to deliver those plants to your charge. I am, &c.

*Fort St George, Feb. 14. 1792.*

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*Dr James Anderson, to the honourable Sir Charles Oakeley, bart. acting governor, and council, Madras.*

HONOURABLE SIRS,

I AM favoured with your notice of the arrival of trees, which are no doubt those I recommended to be sent from

China; but as it appears by your correspondence with Dr Berry that you disapprove of a botanical garden, and expect that he will only take care of the nopal, I am totally at a loss how to dispose of them.

I can only say that the introduction of cochineal is a distant object, and the garden at Marmalon may be usefully employed, as I have long ago stated to your board; and as the honourable the court of directors have approved, in ordering these plants from China, I am unable to recommend him to take care of them, till your farther pleasure is known.

As the gentlemen at the factory have so handsomely acquitted themselves, I must recommend that in your first letter to Canton you will desire plants of the can-la-chu and choui la-chu, mentioned in my letter to your board, 24th November 1789, to be sent here.

As there are now plantations of mulberries through the whole extent of the coast, and as it will be of good consequence to extend the cultivation of the nopal, at those places where it may be cultivated without any additional expence, I should be glad that you give directions to the postmaster general to receive letters, weighing eight ounces, which will enable me to transmit them.

I expect that you will favour me with a list of the superintendants of mulberry plantations, and an account of the charges they have made. I am, &c.

Fort S: George, Feb. 15.

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*Cha. N. White sec. to Dr James Anderson.*

SIR,

I AM directed to acknowledge the receipt of your letter of the 15th, inst. and to acquaint you that an application will be made to the supercargoes at Canton, agreeably to your recommendation, and that the postmaster will be directed to receive letters from you, for the purpose you mention, in such number as may not increase the weight of the tappals beyond what has been ordered, to prevent delay in conveyance of the posts.

Mr Berry was directed not to put the company to any additional expence on account of the botanical garden, until the court of directors shall have signified their plea-

sure respecting that establishment; and as the reception of China plants cannot be attended with any increase of charges, the honourable the governor in council approves of your recommending them to his care.

You will be furnished with a list of the mulberry plantations, and an account of their expences, when all the superintendants have reported the information required of them by some late orders from government. I am, &c.

Feb. 18. 1792.

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*Dr James Anderson, to colonel Kydd, Bengal.*

DEAR SIR,

I HAVE the pleasure to send by captain Pitman, who has been obliging enough to take charge of them, six tallow trees, and six lacquer trees, lately arrived from China.

I have not yet opened the box with the barometers you sent. As captain Kydd, and the gentlemen in Maissore have been so nobly employed, I have not ventured to divert their attention; but whenever the barometers can be attended to, in the manner you have specified, the experiments of measuring the heights will no doubt enable a better judgement to be formed of what the different countries are fittest for, than any thing we are yet possessed of.

Feb. 27. 1792.

I am, &c.

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*Dr James Anderson, to captain Simpson, commanding the ship General Abercrombie.*

DEAR SIR,

UNDERSTANDING that you mean to touch at every port on the Malabar coast, in your way to Bombay, I beg leave to trouble you with sixteen wine baskets, filled with three different kinds of nopal plants, that have been raised here for the culture of cochineal, (viz.) from his majesty's garden at Kew, from the French king's garden on the isle of France, and from China.

As the baskets are filled, and closely packed with nopal branches, which can receive no injury, you may throw them into the ship's hold, or stow them away in any manner the least inconvenient, taking care only that they

may be readily come at, as I wish you to distribute some at every place you touch at, to such persons as will undertake to plant them.

I have likewise the pleasure to send you nine copies of the publications I have made on the subject.

Sincerely wishing you health and a happy voyage,  
March 7. 1792. I am, &c.

*Captain Simpson, to James Anderson, esq. physician general.*

DEAR SIR,

I HAD the pleasure of receiving your letter, of yesterday's date, with nine sets of each of your publications, accompanied with a request that I would take charge of sixteen wine baskets filled with three different kinds of nopals, that have been raised in your garden at Madras for the culture of cochineal.

I most chearfully accept the charge, and shall not fail to distribute a part of each sort, with a set of your publications, along the Malabar coast, and at Bombay, to such persons as I judge will pay attention to a plant so easily brought forward, and that ultimately may prove so advantageous to that side of Indiz.

I shall hereafter have the pleasure of acquainting you in what situation, and with whom I have placed them, and have not the smallest doubt of their succeeding perfectly to your wishes. I have the honour to be Sir, &c.

March 8. 1792.

*Dr James Anderson, to the honourable Sir Charles Oakeley, bart. acting governor and council.*

HONOURABLE SIRS,

By captain Simpson, who brought the tallow and lacquer trees in safety from China, I have sent to the Malabar coast five cart loads of nopals, chiefly of the sort that came from Kew garden, and having a perfect reliance on the integrity and attention of this gentleman, I have the honour to inclose the copy of his answer to me, which you will be pleased to transmit to the government at Bombay, with a requisition on your part, that the plants captain Simpson delivers be properly taken care of, as there can

be no doubt that, sooner or later, the cochineal insect will be sent from America to this country, and it will be of great consequence to have plants every where in readiness for their reception.

On the 18th November 1789, I had a promise from your board of obtaining from Sumatra trees of that country, but to this hour have heard nothing more of the matter—what this silence can be owing to, I am at a loss to say, as Mr Crisp, governor of Bencoolen, is reputed to have much attention to subjects of this nature.

As the ship Asia is about to sail for that island, I beg leave again to request your attention to my letter of the 12th November 1789, and having it in contemplation to promote an attention to the culture of the bread-fruit tree, I am induced to request you will particularly specify two kinds of bread-fruit trees, which captain Lewis of that establishment tells me grow there, and are mentioned in Marsden's history of Sumatra, under the Mallay names of Sookoon and Calawee. I am, &c.

March 12. 1792.

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*Mr R. Clerk, to Dr James Anderson.*

SIR,

I AM directed by the governor in council, to acknowledge the receipt of your letter of the 12th instant, and to acquaint you that letters will be written to the gentlemen at Bombay and fort Marlbro', agreeably to your request.

March 14. 1792.

I am, &c.

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*To be continued occasionally.*

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TO CORRESPONDENTS.

THE favour of *Liberalis* is come to hand; but perhaps it is rather a little too late to answer fully the intentions of the writer. Postage not paid.

The observations of *Sam. Bomfshell* are received; but they seem to be at present unnecessary, as the event to which they allude has actually taken place, and no person has expressed dissatisfaction at it, which shows that the remarks of this writer are very just;—but it is unnecessary to combat a shadow. His farther correspondence will be very acceptable.

The observations of *A B* shall have a place as soon as convenience will permit.

The third letter of *Trader Political* is received.

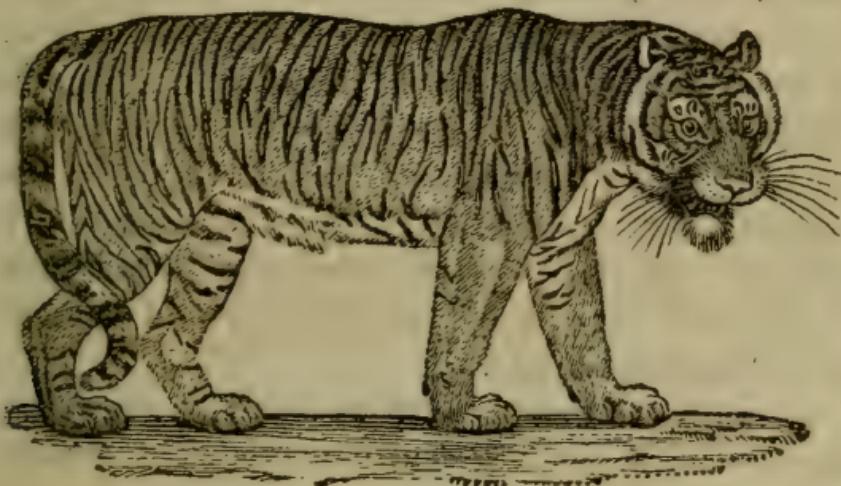
The verses by *W. G.* are received, and shall be applied as he desires.

Many acknowledgements still deferred for want of room.

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THE BEE,  
OR  
LITERARY WEEKLY INTELLIGENCER,  
FOR  
WEDNESDAY, SEPTEMBER 12. 1792.

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THE ROYAL TIGER.

THE tiger is one of the largest and most ferocious animals of the cat kind, the peculiar distinguishing characteristic of which class is a set of formidable claws, which are capable of being extended or drawn in at pleasure. Fortunately they are a solitary class of animals which never unite for mutual defence, like those of the herbivorous kind, nor join in packs to hunt for prey, like those of the dog kind. They seek their food alone, and are frequently ene-

inies to each other ; though differing greatly in size and colour, they are nearly allied to each other in form and disposition, being all fierce, rapacious, and artful.

No quadruped can be more beautiful than this animal ; the glossy smoothness of his hair, and the extreme blackness of the streaks with which he is marked, on a ground of a bright yellow, agreeably strike the beholder. He is larger than the leopard, though slenderer and more delicate. The principal distinction of the tiger, and in which he differs from all other mottled beasts, is in the form of its colours, which run in streaks nearly in the same direction as the ribs, from the back down to the belly. On the leopard, the panther, and the ounce, the colours are broken in spots all over the body ; but in the tiger they extend lengthwise, and hardly a round spot is to be found on its skin.

Of all animals the tiger most resembles the cat in shape ; but in size it so much exceeds this common domestic that the resemblance does not strike one so strongly who beholds the live animal, as when he views a good representation of it in a print. Mr Buffon informs us that he had been assured by one of his friends, that he saw a tiger in the East Indies of fifteen feet long. He probably included the tail in these dimensions ; therefore, allowing four feet for that, it must have been eleven feet from the tip of the nose to the insertion of its tail.

The tiger does not pursue his prey, but bounds upon it from his ambush with great elasticity, and from a distance that is almost incredible. If they

miss their object, they instantly retire ; but if they succeed they carry off their prey with ease, were it even as large as a buffaloe, without feeling any impediment in its flight. They are thought to prefer preying on the human flesh to that of any other animal. They lurk among the sides of bushes, and almost depopulate many places. If they are undisturbed, they plunge their head into the body of the animal up to the very eyes, as if it were to satiate themselves with blood.

The tiger is peculiar to Asia, and is found as far north as China and Chinese Tartary : it inhabits mount Ararat, and Hyrcania, of old famous for its wild beasts. The greatest numbers are met with in India, and its islands. In the mouth of the Ganges, in particular, are many islands which, when that country first came under the dominion of Britain, were inhabited by a numerous people. The famines that were occasioned by the earliest effects of European rapacity in those regions, extirpated the inhabitants ; and such is the rapid progress of desolation in a fertile country, destitute of people, that these extensive islands are now only covered with woods, and so overrun with wild beasts, that the people who go thither to take up salt from the lakes, must always have a strong guard to protect them from the tigers ; notwithstanding which, there never is a season in which several people are not thus carried off and destroyed.

The following story is well authenticated. Some ladies and gentlemen being on a party of pleasure, under a shade of trees, on the banks of a river in Bengal, were suddenly surprised at seeing a tiger

ready to make its fatal spring ; one of the ladies, with amazing presence of mind, laid hold of an umbrella ; and, unfurling it, directly in the animal's face, it instantly retired. Another party had not the same good fortune. A tiger darted among them while they were at dinner, seized on a gentleman, and carried him off in the sight of his companions. One of these, however, had the presence of mind to level his piece at the animal, and fired so fortunately as to kill him. The gentleman who was carried off escaped with a slight mutilation, and is at present alive in Great Britain.

' The tiger is the most terrible scourge of the country wherever he is found. He is not only strong and nimble, but ferocious and cruel to an astonishing degree. Though satiated with carnage he perpetually thirsts for blood. His restless fury has no intervals, except when he is obliged to lie in ambush for prey at the sides of rivers, to which other animals resort to drink. He seizes and tears to pieces a fresh animal with equal rage as he exerted in devouring the first. He desolates every country that he inhabits, and dreads neither the aspect nor the arms of man. He sacrifices whole flocks of domestic animals, and all the wild beasts which come within the reach of his claws. He attacks the young of the elephant and the rhinoceros, and sometimes even ventures to brave the lion. His predominant instinct is a perpetual rage, a blind and undistinguishing ferocity, which often impel him to devour his own young, and to tear their mother in pieces when she attempts to defend them. He delights in blood, and gluts him-

self with it till he is intoxicated. He tears the body for no other purpose but just to plunge his head into it, and to drink large draughts of blood, the sources of which are generally exhausted before his thirst is appeased. The tiger is perhaps the only animal whose ferocity is unconquerable. Neither violence, restraint, nor bribery, have any effect in softening his temper. With harsh or gentle treatment he is equally irritated. The mild and conciliating influence of society makes no impression on the obduracy and incorrigibleness of his disposition. Time, instead of softening the ferociousness of his nature, only exasperates his rage. He tears, with equal wrath, the hand which feeds him, as that which is raised to strike him. He roars and grins at the sight of every living being. Every animated object he regards as a fresh prey, which he devours beforehand with the avidity of his eyes, menaces it with frightful groans, and often springs at it, without regarding his chains, which only restrain, but cannot calm his fury.

The foregoing animated description is extracted from Smellie's philosophy of natural history. Since that book was written, a fact has been narrated in all the public prints, which, if true, seems to show that the tiger, under proper circumstances, may possibly be tamed to a certain degree.

A beautiful male tiger, lately brought over from India, in the Pitt East Indiaman, was so far domesticated, as to admit of every kind of familiarity from the people on board. It seemed to be quite harmless, and as playful as a kitten. It frequently slept

with the sailors in their hammocks ; and would suffer two or three of them to repose their heads upon its back, as upon a pillow, whilst it lay stretched out upon the deck. In return for this, however, it would now and then steal their meat. Having one day taken a piece of meat from the carpenter, he followed the animal, took the meat out of its mouth, and beat it severely for the theft ; which punishment it suffered with the patience of a dog. It would frequently run out upon the bowsprit ; climb about the ship like a cat ; and perform a number of tricks, with an agility that was truly astonishing. There was a dog on board the ship, with which it would often play in the most diverting manner.

If there were no reason to doubt the truth of this account, still we must advert that it was only a month or six weeks old when it was taken on board the ship. It is probable, from what is known to be the case with others, that when it had attained a mature age, its natural ferocity might have returned ; for among the great number of tigers which have been carried through this country as a show, it is found, in general, that neither gentleness nor restraint have any effect in softening its temper. It does not seem sensible of the attention of its keeper ; and would equally tear the hand that feeds, with that which chastises it.

We are informed by captain Hamilton, that in Shindah Raja's dominions there are no less than three sorts of tigers, the smallest of which are the fiercest. The small ones are about two feet high, the second three feet, and the larger sort above three feet and an

half high. But the latter, though possessing superior powers, is less rapacious than either of the former. This formidable animal is called the *royal* tiger, and does not seem so ravenous nor so dangerous as the others. The figure that accompanies this was made with great fidelity from an accurate drawing of a very fine one of this kind, that was sometime ago exhibited as a show in Edinburgh, and is now going about through England for the same purpose.

We have no certain accounts of the number of young which the tigress brings forth, but it is said she produces four or five at a time. Though furious at all times, upon this occasion her ferocity is increased. If she be robbed of her young, enraged, she pursues her spoiler, who is said sometimes to escape, with a part, by the following device. He first drops one of her cubs, which she carries back to her den, and again returns to the pursuit; he then drops another, with which she runs to her den as with the former, when the plunderer often gets off with the remainder before her return. If she be robbed of all her young, she becomes desperate, boldly approaching the towns, where she commits incredible slaughter.

The skin of the tiger is much esteemed all over the east, especially in China, where the mandarins cover their seats of justice with it; but in Europe, those of the panther and leopard, are held in much greater estimation. Here, it derives no value from the difficulty of obtaining it, and the honour derived from its conquest. The Indians sometimes eat the flesh of this animal, though they do not look upon it as a delicacy.

The chariot of Bacchus is represented in ancient mythology as drawn by tigers ; and tigers are sometimes seen at the feet of the bacchanals. It is emblematic of the fury with which they are agitated.

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#### HINTS RESPECTING THE CHINESE LANGUAGE.

IT is not a little curious to trace the circumstances that may affect the language of a particular people, and produce a diversity in the modes of expressing their ideas.

The kingdom of China has subsisted as a separate state for a greater number of years than any other that we know of on the globe. The customs of that people, and the political institutions of their empire, have changed less than those of any other nation. These, therefore, must have had a more lasting, and consequently a stronger influence over the minds of the people than is to be expected any where else.

From these considerations we are to expect that the peculiarities of expression, necessarily arising from the mode of writing adopted by them, will have a greater influence over their mode of thinking and oral expression, than among nations that have known the use of written characters for a shorter time.

Every person knows that the written language of China, is extremely different from that of Europe. In China the use of alphabetical letters is unknown. Every word has a distinct character to denote it, and of course it is a task of extreme difficulty to acquire a facility in the art of writing there.

To diminish the immense multiplicity of words, many curious devices must have been adopted, which we in Europe can scarcely form an idea of. Many words which we find extremely convenient for connecting and modifying the meaning of nouns and verbs will be suppressed in writing ; and a scope will thus be given to the imagination of the reader to supply these, with which we are entirely unacquainted. What effect this will have upon the general phraseology of the people it would be curious to trace, though it must be a matter of nice and difficult investigation.

Even European languages, in which every oral word that is employed admits of being reduced to writing, with the utmost facility, afford examples of the total suppression of some parts of speech in one language, which are deemed essentially necessary in another. In Latin, for example, the word *homo*, denotes, alike, what, in English, would be expressed by man in general, by a man, or the man, as in these phrases : “ *man* is the most sagacious animal on this globe ;” “ *a man* came to me from the city ;” “ *the man* who came from the city was a fool.” Yet those who are acquainted with Latin think they perceive no want here, while those who write in English would think their meaning could only be guessed at if they wanted any of these words : In like manner, the written Hebrew language has no vowels, though we would think that our written language would be totally unintelligible without them.

But in the Chinese written language, the suppression of words, for the reasons already given, must be much more common than in European languages.

This we would conclude from reasoning alone ; and it is confirmed by the following letter, that was communicated to me by an ingenious gentleman, to whom the literary world is much indebted for many valuable essays. The letter was written near twenty years ago, by a gentleman who is now no more ; and I print it the more readily at the present time, in the hope that it may fall into the hands of some of the gentlemen who are to go with lord Macartney, on his embassy to China ; and may probably suggest to them some subjects of enquiry that might otherwise escape them, among the vast diversity of new objects that must necessarily solicit their attention.

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“ I have lately met in company Whang-At-Ting, the Chinese, who is now in London ; of whom, if you have not received any account, you may perhaps like to hear some particulars. He is a young man of twenty-two, and an inhabitant of Canton, where having received from Chit-qua, the Chinese figure maker, a favourable account of his reception in England, two or three years ago, he determined to make the voyage likewise, partly from curiosity, and a desire of improving himself in science, and partly with a view of procuring some advantages in trade, in which he and his elder brother are engaged. He arrived here in August, and already pronounces and understands our language very tolerably ; but he writes it in a very excellent hand, which he acquired with ease by using the copy books recommended by Mr Locke, in which the copies are printed in red ink, and are to be traced over by the learner with

black ink. He has a great thirst after knowledge, and seems to conceive readily what is communicated to him ; and he scruples no pains that will further his improvement. The gentleman at whose house I met him, having, among other Chinese things, a drawing or print representing a naked man, like that in our old sheet almanacks, with straight lines drawn to different parts of his body, he was asked what this meant ; to which he replied, that it was for the use of the younger practitioners in physic, in order to shew them to what part of the body the cauterizing pin should be applied, to remove a disorder in other corresponding parts. For the Chinese practitioners attribute very great powers to the actual cautery, and have frequent recourse to it. And he himself showed a scar, by the side of the first joint in his thumb, where he was cauterized for a pain in his head..

“ As we Europeans have little knowledge of the Chinese language, it will perhaps entertain you, as it did us, to hear his interpretation of the Chinese characters, upon a stick of Indian ink that was shewn him, especially as it conveys some idea of the peculiarities of their language, and shews how they supply their want of connecting particles, by a repetition of the leading word. You are probably aware that they have not an alphabet like other nations ; but that their language consists entirely of a great number of different characters, forming so many complete words, and which in writing are placed one under another in a perpendicular column. I will endeavour, therefore, to give you, in separate columns,

the characters themselves, the sounds of them (as nearly as he could represent them by our letters) and an exact verbal translation of them, from which you will immediately observe, that in this sentence, consisting of twelve characters only, one of them, which answers to our word *thing*, is repeated four times, and so makes a third part of the whole \*.

<i>Ke</i>	Thing	<i>Ke</i>	Thing
<i>Yeng</i>	Shape	<i>Tyey</i>	Body
<i>Fo-ong</i>	Square	<i>Foong</i>	Ugly
<i>Ke</i>	Thing	<i>Ke</i>	Thing
<i>Chat</i>	Hard	<i>Tong</i>	Great
<i>Koong</i>	Black	<i>Thong</i>	Use †.

Rendered into good English it would run thus :

“ In shape it is square, and it is hard and black ; and though it is ugly in appearance, yet it is of great use.”

London, Feb. 18. 1775.

The circumstance that I would most wish to know is, whether in oral expression a mode of phraseology similar to the above translation be adopted, which I scarcely think possible. If it be not, then it must happen that in China the written language is a thing totally different from the oral, and that of course the reader must be obliged, as he goes along, to translate it, as it were, from the *written* into the *oral* language. Some elucidations on this subject would prove very interesting.

\* The Chinese characters are omitted for want of types of that kind.

† There are several remarks would have occurred respecting the *form* of the original Chinese characters, could I have inserted them, but these I must omit.

## ON TASTE IN ARCHITECTURE.

*Continued from vol. x. p. 273.*

Sir,

*To the Editor of the Bee.*

WE are informed by Vitruvius, that, even in the age of Augustus, the chaste models of Phidias began to be disfigured by meretricious ornaments; and that the decline of virtue was suddenly followed by the decline of taste. After the reign of Trajan, we look in vain for elegant simplicity in Roman architecture: every thing in the Roman empire exhibited the marks of corruption, and we need only look at a Roman denarius of the Antonines, to discern the rapidity with which the fine arts hastened to decline, after the loss of liberty. The great characters of the Augustan age had either been bred under the commonwealth, or received their education from citizens who felt the glory and emulation that arise from political importance. Architecture was now in the hands of rude soldiers, effeminate courtiers, or dispirited slaves. The beautiful forms of nature, and the majestic copies of nature, at Athens, were no longer copied; but bulk and tawdry decoration were substituted in the place of decorous simplicity. After the translation of the seat of empire to Byzantium, the oriental forms of building were mingled with the Grecian, and at last terminated in the cumbrous dome and preposterous spire. After the complete destruction of the Roman empire, and the introduc-

tion of feudal laws and manners by the barbarians, nothing can be traced but dungeons for barons, and wooden churches for temples, until, after the formation of regular monarchies in Europe, and the prevalence of munificence among monks, architects and various artists were invited from the east, to erect those stupendous churches, the architecture of which is denominated Gothic, which appears to be only a spurious mode of Grecian architecture, that gradually deviated until the total extinction of all resemblance to the ancient. This total dereliction of the Grecian forms, does not appear until the middle of the twelfth century, though the due proportions had been long neglected, and the gloomy cloister had been for centuries substituted for the spacious and airy portico and colonnade.

During the space of more than four centuries, this new mode of architecture continued to supplant the decayed temples of the ancients, with improving lightness and elegance ; while the castles of the nobility being necessarily destined for defence, were constructed with unabated clumsiness and barbarity\*.

It is not my purpose to enter into any discussion concerning that mode of architecture which is indiscriminately called Gothic, and which has lately been subjected to the remarks of a very sensible and entertaining writer in this miscellany ; nor am I disposed to deny that this form is well adapted to the solemnity of religious worship ; or that, with its magnificent windows, and light carvings and embroidery, admitting through stained glass a rich and glorious illumina-

\* See the accurate history of ancient castles, by Mr Edward King, in the transactions of the Antiquarian Society at London.

nation, it may not, in some respects, contribute more to devotion than the natural and elegant forms of Grecian architecture; I mean only to show that this mode of architecture was adventitious, and not the invention of the nations where it appeared.

When, after the revival of science, and the fine arts, the ancients came to be studied by the great Michael Angelo, it was the glory of that artist to regenerate the art completely, and not to tamper with the vicious forms that he found in Italy. Neither was it Vitruvius that he studied, but the remains of Athenian perfection, which he traced in the rubbish of Rome, and wherever they were to be discovered in Italy. St Peter's and other fine modern buildings were the fruits of his study, and of that of his associates and successors; but he copied them in their chaste simplicity, and did not jumble forms together, as has been done by our modern architects.

He could not resist adopting the rotunda of the temple of Agrippa for St Peter's, without which I am apt to believe it would have been more perfect. The dome is a clumsy heavy form, that fills the eye without enlarging the imagination, and has been unfortunately too much a favourite with the successors of Michael Angelo.

Michael Angelo and Raphael, though worshipped by artists, are not admired, I believe, in the way they themselves would have chosen. They are admired for their genius, but would have claimed to be praised for their good sense and discernment. They did not fill their portfolios with drawings of their own composition, but with studies from the antique. From these without deviation (except where they

were forced by their employers, they brought forth those master pieces that immediately charmed the eye of every beholder. They applied, as it were, the spear of Ithuriel to the latent forms of Greek and Roman art, and produced them once more to be the admiration of the universe.

The same observations are applicable to the chizzel of Bernini, and to the pencils of the best scholars and successors of Raphael. The mind of Michael Angelo, filled with the images of that noble simplicity which characterises the stile of Grecian architecture, saw the deformity and meanness of double tiers of columns and arches ; and the poverty of a façade without deep columnar shadows, and projecting parts in the whole, to obviate that flatness which nature abhors in all her works : that nature which was the model from which his great masters originally copied, and which we must copy, if we shall dare to invent with the hopes of excellence.

Neither was it the buildings of the ancients alone that Michael Angelo studied, or that formed his transcendent taste.

He studied the beautiful forms of the ancient statues.

“ The quiver'd God in graceful art who stands,  
His arm extended with the slacken'd bow,  
Light flows his easy robe, and fair displays  
A manly soften'd form. The bloom of gods  
Seems youthful o'er the beardless cheek to wave;  
His features yet heroic ardour warms;  
And sweet subsiding to a native smile,  
Mix'd with the joy elating conquest gives,  
A scatter'd frown exalts his matchless air.”

THOMSON.

Taste in architecture, therefore, is the child of sensibility, of nature, of experience, of the study of the antique, of good sense and propriety.

It will languish in a rude climate, where there is not wealth to promote great undertakings ; it will be debauched and enervated in any country where sudden wealth has checked its progressive improvement, and prescribed plans to it, that are inconsistent with classick examples ; and it will be finally destroyed by the introduction of patch work ornament, and diminutive parts, even though every individual part may be taken from the best models.

As I write for no particular country, I shall escape the censure that I might incur by blaming artists ; but these, in all countries, if not blinded by vanity or corrupted by vicious practices in architecture, will read their chastisement in the luminous principles that are drawn from the history of the art, and its connection with the inexterminable principles of the human understanding and the human heart.

As the fine models of antiquity were, from the wealth of individuals, and the general diffusion of that wealth in Britain, more copied in the internal decorations of apartments, than in the verification of great models and in public edifices ; so almost all our artists have been faulty in the poverty of their designs, in the want of noble columniation, shadowy division of parts, and in what I would beg leave to call the perspective of architecture.

Thus, have I completed the sketch of my reflections, on the sources of improvement in architecture, and concerning that taste by which it must be

regulated to render it noble, convenient, and delightful. I have shown that the original elements of its perfection are to be sought for, and discovered only in nature and sensibility; and that nature, in the high example of the Greeks, can never be relinquished without deformity and disappointment. I might have dilated these observations to swell into a book, and sold them to a bookseller, escaping the sneer of prouder authors, as a periodical dangler; but in the business of writing, I am of the opinion of St Augustine, "*that a great book is a great evil;*" and being exceedingly desirous of giving a proper direction to the overflowing wealth of my countrymen in architecture, I have systematically chosen the most sudden and extensive channel of communication. To many there will seem to be little contained in this last essay, and to a few there will seem a great deal; I will not, I cannot, conceal that I am, and always have been desirous of pleasing only a few. I am, Sir,

Your obedient humble servant,

B. A.

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## ON SHOOTING PIGEONS.

SIR,

*To the Editor of the Bee.*

I HAVE observed for these two or three years past, advertisements in the news-papers from an associated body of proprietors, threatening to prosecute the shooters of pigeons; and which, as these advertisements appear only at this season of the year, it may be presumed that it is thereby intended to *intimidate*

the farmers from taking that mode of protecting their crop, from the ravages of these destructive creatures.

With respect to the *law*, in this case, I must take the liberty to observe that the old *Scots* acts on this subject, *still unrepealed*, are totally silent as to *shooting* or *destroying pigeons*, although they guard with abundance of precision against the breaking of pigeon *houses* \*.

To judge then from the dictates of *reason* alone : is it at all reasonable that the *poor* tenant should be obliged to suffer the pigeons of the *opulent* landlord, not merely to *feed* on his crop, but to *destroy* it ? for it is a well known circumstance that a flock of pigeons alighting among a field of wheat, destroy at least fifty times as much as they eat. Thus, to save the great in an one shilling, his poor tenant must suffer a loss of fifty !

I am positively certain, that in my own farm, which is not very extensive, I lose every year, at this time, *fifty bolls of wheat*, not eaten, but *destroyed* by pigeons. I aver also, that all the pigeons for a mile around me, do not produce a revenue to their wealthy owners of *ten pounds* the whole year. These are facts that I can well substantiate ; nor is my situation at all singular ; it is the case of the whole of the low country in general. In this manner there is at least *five thousand bolls* of wheat in this county

\* The British statute on this subject, which was made, I think, in 1762, besides that it does not *repeal* the old *Scots* acts, it makes the pena-  
nes *excessive* only in *Westminster-hall*, so that it cannot possibly be  
construed to extend to *Scotland*.

annually destroyed in the filling season by pigeons, which do not themselves yield L. 500 of revenue *per annum*. This is not merely vexatious and oppressive to the farmers, it is a *national calamity*, worse than the *mildew* or the *smutt*,—I had almost said, than the *Hessian fly*; and yet if the industrious husbandman, indignant at the havoc made in his crop by these vermin, should attempt to prevent it by destroying them, he is in danger of being overwhelmed by a whole combination of landlords against him!

It would be more laudable in these great men to enter into an *association to feed their own pigeons* at this season of the year, than to prosecute those who in defence of their property destroy them. The damage they do to the standing corns is far beyond what is saved in the expence of their feeding.

It may be alleged that the farmers, instead of shooting the pigeons, may drive them away by *scares* and *ricketts*. But that has always been, and ever will be, a vain attempt, so long as their owners withhold food from them at home. Nay, shameful as it may seem, it is a notorious fact, that *many wealthy owners of pigeons, with the greatest assiduity, drive away their own flocks at this season from their own lands, that they may prey on the crop of the neighbouring farmers!*

One world almost think, that in *these revolution times* there is a general *conspiracy* against our *good old constitution*. On the one hand we have the *democratic faction* endeavouring to inflame the minds of the people against it, by misrepresenting our own situation, compared with their *Frenchified* ideas of civil

liberty. On the other hand we see the *aristocratic* interest in the most public manner setting up a wild claim of privilege that *their pigeons*, forsooth, *must not be molested in the act of destroying the crop of the country!* If it is *unseasonable* at this time on the one side, to cry up a *reform*, it is surely as unseasonable on the other side to *irritate* by the assumption of *unreasonable* and *ill founded* privileges.

Mid-Lothian,  
Aug. 22. 1792.

COMMON SENSE.

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## DETACHED REMARKS.

### *For the Bee.*

To receive a favour with a good grace, requires a certain greatness of soul, which our natural pride, and love of independence, render it difficult to exercise; but that surely is an unbecoming pride, which makes us revolt against obligations, conferred by those we esteem, and wish to make happy. It is one unhappy consequence of an extensive knowledge of the world, to render us cautious and suspicious, and to check that sweet benevolence that glows in the bosom of uncorrupted youth. Always believe the best you can of your species; but remember that appearances are often fallacious, and, if trusted on every occasion, may betray you into error, and even danger.

The children of misfortune have a claim, not only to sympathy and relief, but to respect, because they are peculiarly sensible to the wounds inflicted by carelessness and neglect. Small favours and quiet atten-

tions, excite a more pleasing and tender gratitude, in minds of real delicacy, than great obligations. We are oppressed with a sense of the latter, and the feeling of conscious inferiority they awaken is always painful; but the former is soothing to our self-love, without wounding our pride or generosity.

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Splendid actions are often the effect of vanity; constant attentions are always the offspring either of friendship or humanity.

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Console yourself with the innocence and integrity of your heart, and trust that *being*, who is not only powerful to protect, but merciful to support suffering virtue, and who at last will eternally reward it. Often when our prospects are most gloomy, and our way most perplexed, that unseen hand, which directs the course of human affairs, is stretched out for our deliverance, and conducts our steps to safety and peace. Conscious of the rectitude of my intentions, I commit the issue of my conduct to that *being*, whom it is my unfeigned desire to please, who will confirm the good resolutions he inspires, and never forsake those who trust in him.

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In spite of all the inconveniences to which it exposes its possessor, a feeling heart is surely to be regarded as the first of heaven's blessings. Its very pains are pleasing; how exquisite then its joys! Other qualities are perhaps more essential towards forming the character, but sensibility never fails to

constitute the truly amiable one. The too great indulgence of tender feelings, however, often proves prejudicial to the exercise of the social virtues ; it is only when the former are properly regulated, that they become respectable, by leading to the due discharge of the latter.

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Though cheerfulness cannot always be maintained, amidst the unavoidable evils of life, there is a peace that may be ours, even while struggling with its heaviest misfortunes ; a peace, the concomitant of virtue, which *religion* alone can give, and guilt only take away. The great foundation of this invaluable treasure, must be laid in just apprehensions of the *divine nature* and government. If we believe, as we ought, that we are the offspring of a great and good God, who, by his essential attributes, is present in every place, directing all events, and carrying on, by infinite wisdom, the plan of his divine government, to complete perfection ; if we believe that he has placed us here as on a theatre, where our dispositions must be improved, our actions displayed, and our virtues tried, in order to future retribution ; if we know that, superadded to the feeble glimmerings of nature, he hath caused the glorious light of revelation to arise, to dispel our fears, confirm our hope, and lead our desires to suitable objects ; if we are assured that events here, shall prepare us to eternal felicity hereafter,—how can we be otherwise than cheerful, serene, and happy ? Let us habituate our minds to the prospect of that fast approaching future, the awful importance of which will cause the heaviest of our

present evils to seem light ; yes, the time is coming when piety and benevolence shall be rewarded with that felicity, which even in this world they anticipate, and which shall be the portion of the truly good, through ages that shall never end.

Oh ! my dear friend, how do trying situations endear to us the great truths of religion. It is religion which stills the violence of passion, and soothes the most turbulent to peace ; it is that which, in the darkest hour of adversity, illumines and chears the soul of man ; it is that which proves the real dignity of our nature, by discovering to us our origin and destination ; it is that alone which converts the fearful apprehension of a mortal separation, into the confirmed hope of an everlasting reunion, with those whom our souls hold dear.

MIRA.

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#### FROM A CELEBRATED AUTHOR.

MORAL philosophy makes the *honest man*.

Natural philosophy, the *ingenious man*.

History, the *man of experience*.

Poesy, the *man of wit*.

Rhetoric, the *eloquent man*.

Polite learning sheds a diffusive grace and ornament upon all kinds of literature.

The knowledge of the world constitutes the *intelligent man*.

The study of the sacred pages forms the *good man*.

But ALL these must go together to make the *perfect, complete gentleman*.

THE MOURNING MOTHER.

*For the Bee.*

FROM heav'n's wide concave, where serenely mild  
The eye of mercy beams upon the blest,  
Look down anointed spirit of my child,  
And view the anguish of a parent's breast.

Yet rather turn from misery and woe,  
Thou dearest offspring of connubial love ;  
Nor let a mother's wretchedness below,  
One moment dash thy happiness above.

Oh nature ! thou my aching bosom arm,  
With force of soul to play my trying part ;  
Thou who with magic hand hast fix'd the charm,  
That twists a child so strongly round the heart.

Dear, lost Eliza ! in thy infant years,  
When sweetness lisping prattled o'er its toys,  
One smile of thine would dissipate my fears,  
And fill my bosom with a thousand joys.

Thy winning softness and thine artless truth,  
The starting tears from misery have stole ;  
Supplied the buried husband of my youth,  
The first and last posession of my soul.

Thou wert that all which fortune had bestow'd,  
To endear this transient and unreal stage ;  
To smooth life's weary and fatiguing road,  
And cheer alike infirmity and age.

What scenes of fancied pleasure would I trace,  
Thy little race of prattlers to attend ;  
And pass the short remainder of my days,  
A grandchild's parent, and a daughter's friend.

Delusive dreams ! return to glad my years ;  
O rise again in all your form so fair !  
Dejection now for happiness appears,  
And grief array'd by solitude and care.

Pardon just heav'n !—But where the heart is torn,  
The human drop of bitterness will steal ;  
Nor can we lose the privilege to mourn,  
Till we have lost the faculty to feel.

Religion come! thou sister of the skies,  
And quickly lift thy salutary rod;  
Nor let this daring argument of sighs,  
Too boldly tax the justice of my God.

O! make me, then, all-seeing pow'r, resign'd  
Thy awful fiat humbly to receive;  
And O! forgive the weakness of a mind  
Which feels as mortal, and as such must grieve.

And you, ye dames! your soft'ning tears employ,  
You who can paint the sorrows of the blow;  
For who that ne'er throbb'd with a mother's joy,  
Can guess the depth, the wildness of her woe. W. W.

## EPITAPH ON LADY AB—R—V—Y.

YOUNG, thoughtless, gay, unfortunately fair,  
Her pride to please, and pleasure, all her care;  
With too much kindness, and too little art,  
Pone to indulge the dictates of her heart;  
Flatter'd by all, solicited, admir'd,  
By women envied, and by men desir'd;  
At once from all prosperity sic's torn,  
By friends deserted, of defence forlorn,  
Expos'd to talkers, insults, want, and scorn.  
By ev'ry idle tongue her story told,  
The novel of the young, the lecture of the old.  
But let the scoffer or the prude relate,  
With rigour or despight, her hapless fate,  
Good nature still to soft compassion wrought,  
Shall weep the ruin, whilst it owns the fault.  
For if her conduct, in some steps betray'd,  
To virtue's rules too little rev'rence paid;  
Yet dying still she show'd (so dear her fame,) }  
She could survive the guilt, though not the shame;  
Her honour dearer, than her life she prov'd,  
And dearer far than both, the man she lov'd.

## EPIGRAM.

MON médecin me dit souvent  
Que trop de vin me tue,  
Et me defend absolument  
De toucher les filles nues;  
S'il faut renoncer au bon vin,  
Et des brunes et des blondes,  
Adieu hon Monsieur médecin!  
Je part pour l'autre monde.

F.

## THOUGHTS ON THE PRODUCTION OF NITRE.

Few phenomena have occurred that are more unaccountable than those which relate to the production of nitre; and the experiments that have been made on this subject have afforded results extremely different, in circumstances that seemed to be essentially the same. Hence it happens that the same process which produces abundance of nitre in one country, will yield none at all in another, though conducted with equal care.

I have never yet heard of an attempt to account for this singular peculiarity. It is in general supposed that nitre is a fossil production; that it is generated in greatest abundance in fat, vegetable mould, which has been impregnated with animal substances; but though rich vegetable mould, impregnated with animal substances, yields nitre on some occasions in abundance, in other situations it has been found to afford none at all. This seems to afford a satisfactory proof that animal impregnation alone is not the essential circumstance for the production of nitre.

Vegetable mould is originally generated by the decaying of vegetable substances in it. This position I believe will not be disputed. If so, as there are a variety of vegetables that possess qualities extremely different from each other, it ought to follow that the soil which has been generated by the decayed vegetables of one kind, may be very different, in certain respects, from the soil that has been produced by the decomposition of vegetables of another class, though they may be both equally capable of rearing the common kinds of plant that grow in Europe. Two soils, therefore, may be equally rich, considered as to their vegetative power, which are extremely dissimilar in other respects.

On this principle I think it is possible to account for the phenomenon already remarked. Nitre may be produced by the decaying of certain plants, and not by others. Some light is thrown upon this subject by the following remarks and experiments, published in the fourth volume of the Memoirs of the Imperial Academy of Sciences and Belles Lettres, of Brussels, by M. Van Bochauë.

‘ It is well known,’ he observes, ‘ that *borage*, *balsam*, *gloss*, *parietaria*, and *sunflower*, often contain a good deal of saltpetre ; but this is afforded in still greater quantities by several kinds of *chenopodium*, as appears by the following experiments :

‘ Two years ago,’ says he, ‘ I made the analysis of a plant of the class *pentandria*, order *digynia*, which is called by some *chenopodium ambrosioides Mexicanum*, and by others *botrys ambrosioides Mexicanum*. Having visited the extract made from it in the *balneum marie*, some days afterwards, we were surprised to find the surface of that extract altogether covered with oblong chrystals, which upon examination with a glass, we found to be prismatic; like that of the best saltpetre. They detonated when thrown upon a burning coal, and fused. We put some of the extract upon a red hot shovel ; it detonated and fused also, leaving behind it a good deal of fixed vegetable alkali. We even went farther : we put some of the dried plant upon the same shovel ; it fused and detonated also. We tried in the same manner the *botrys ambrosioides vulgaris*, and this plant fused and detonated the same as the *Mexicana*. In fine, we procured the same plant from different apothecaries, they all fused and detonated equally with the other. From hence, adds he, we have concluded, that these two plants are very nitriferous ; and that their economy is a natural nitrerie, (nitr e work.) This, says

he, is the more certain, as the *botrys vulgaris* is known to grow for ordinary, upon a dry sandy soil, which does not appear to contain saltpetre?

The author recommends these plants to the attention of chemists, as deserving farther investigation. It is experience alone that can ascertain whether these plants could be cultivated with profit only for this purpose.

In the mean while I cannot help thinking it natural to conclude, that if these plants had long been suffered to be decomposed in the soil, the mould might thus become impregnated with saltpetre, from which it may be extracted by a proper process.

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#### INTELLIGENCE RESPECTING ARTS, AND AGRICULTURE.

##### *Sheep of Colchis;*

COLONEL FULLERTON, so well known for his active exertions in the military line in India, has, for some time past, become a peaceful citizen, applying his active talents to the improvement of agriculture and manufactures. About two years ago, he imported from Colchis that breed of sheep so long famed in story for their fleece. It appears from his experience that this fleece is more to be valued on account of the quantity than the quality of the wool. It is of the long combing sort. The animals themselves are strong made and hardy. Their lambs in particular are found to thrive better, and to fatten more easily, than those of any other breed with which he had an opportunity of comparing them.

##### *New improvement in the iron manufacture.*

HE has also discovered an improvement in the process of smelting iron, that promises to prove highly beneficial to that manufacture in this country. Its effects are, that it will considerably diminish the quantity of fuel consu-

med in that operation, and consequently lower the expence of that process, the iron coming from the furnace equally pure after one smelting, as it can be made by the operations now in use, by being smelted twice at least. There is also reason to believe that the iron will be rendered thus softer and more malleable than it now is ; as it is well known that metals in general are rendered more brittle the oftener they are fused. The particulars of this process will be communicated to the public as soon as the Editor shall be authorised to do so.

#### NOTICES OF IMPROVEMENTS NOW GOING ON IN INDIA.

THE views of Dr Anderson, and the way in which he promotes improvements in India, are beautifully illustrated by the following letters.

*From John Braithwaite, to Dr. James Anderson, physician general; Madras.*

DEAR SIR,

I RETURN you many thanks for the communication of your farther correspondence in relation to the silk business. I think it promises fair ; and were we once clear of war and famine, I think would certainly succeed.

The times have been, and are against it. We have not hands at present sufficient for agriculture ; the half of these circars are a desert waste, and in some measure owing to the great manufacture of cloth, which, in proportion to the population of the country, takes too many hands from agriculture.

I believe the first great object to attend to in all countries, is to procure abundance of food at a cheap rate, which soon creates abundance of people, and when you have abundance of food, and a superabundance of people, then is the time to set on foot, and encourage manufactures ; but I fear in the present state of these countries, let the industry of individuals be what it may, no new

1792.

*improvements in India.*

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manufacture can be, successfully established ; but, on the contrary, those so long since established, must decline.

I am, &c.

Feb. 19. 1792.

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*From James Anderson, to Colonel Braithwaite, commanding the troops north of the Kistna.*

DEAR SIR,

I AM favoured with your letter of the 19th instant, and it is with pleasure I acknowledge the receipt of sentiments so conformable to my own, in as far as the arts, agriculture, and commerce, justly balanced, are necessary for the multiplication of our species ; but you know me better than to suppose I have much expectation of introducing improvements, which, from me, can only be received as speculations, in the present distressful situation of the country.

On the contrary, when you observe the opening of the business of cultivating silk, under the circumstances of war, you will acquit me of establishing a new culture under the circumstances of famine, because I have taken care to make allowances for such serious impediments.

The whole amounts to this, that as we have only a certain time to figure on the stage, it occurred that if I did not employ the present moment, the future might escape my powers ; and thinking I had something to say, that at some future period might be converted to utility, I have ventured to engage in the service of posterity.

In this view of being useful, I shall embrace every opportunity of distributing nopal for the purposes I have mentioned to government ; and knowing that you possess the same laudable disposition, you will not be surprised that I send you some by every tappal for your garden, and the silk when you are better able to receive it. I am, &c.

Fort St. George, Feb. 26. 1792.

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*From James Anderson to Nathaniel Webb esq.*

DEAR SIR,

As I understood there was a famine in your circar, I did not presume to trouble you with the eggs of silk worms in the late cold season, when they might have been safely

conveyed to even a greater distance, under cover of a letter ; for it is needless to suppose that they are bruised when we every day see those eggs that get addled, from any cause whatever, soon flatten and collapse, without any external pressure.

I know that there are mulberry trees enough in your district to supply leaves for a large investment of silk, but the distress of the inhabitants I am truly sensible must have involved you in an infinite deal of trouble and anxiety.

I will only observe that nothing appears to me so well calculated to obviate the frequent repetition of such weighty calamities as a diversity of employment for the lower classes of the people.

No real attempts having ever been made to better the natives ; and their whole subsistence consisting of grain, which can only be raised by rain happening to fall at certain stated seasons, it is obvious that if we can enable them, by the circulation of cash, which must attend the culture of silk, to purchase grain from other countries when their own crop fails, we shall render an essential service to the human race here.

I will not farther obtrude on your cares, than to tell you, that whenever you are sufficiently disengaged, Mr Binny, or Mr Roxburgh, will supply you with eggs ; or, which is much nearer you, Mr Haliburton at Vizagapatnam, to whom I mean to forward some in a few days ; and your establishing the Bungalo will at least save a dozen children from being starved. I am, &c.

Fort St. George, Feb. 15. 1792.

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*From Robert Andrews to James Anderson esq.*

DEAR SIR,

I HAVE been favoured with your letter, forwarding a supply of silk worm eggs, for which I beg you to accept my thanks ; my family have encreased much, and continue to multiply very fast.

The late heavy rains, however, have caused the death of many hundred worms, which I conceive may proceed in some degree from the dampness of the walls of the

house, which are made of mud, in which the worms are kept.

I am yet very unsuccessful in the business of winding off the silk, although I have lately acquired a third person who was expressly sent, as he says, by Tippoo to Bengal, to perfect himself in this branch of the business. He says the silk is of a much slighter texture than that which he has been used to wind off, either in Bengal, or the Mysore country; and the silk weavers who have attended two or three generations of the worms, under me, observe, that the silk first produced by the worms was much stronger than that which they now yield.

If in your power to instruct me in this very material point, I shall esteem myself much obliged, for without it my zeal in the farther prosecution of the business will be much damped. I remain, &c.

Trichinopoly, Nov. 29. 1791.

*From Dr James Anderson to Robert Andrews, esq.*

SIR,

It will be a wretched business indeed, if, after having done so much, your zeal should slacken on the observance of a circumstance which all the world knows, that the silk worm is injured by damp and wet.

In Europe there is but one crop a-year, and you see by Mr Glass's letter they have only three good crops in Bengal; yet here, the climate is so much more favourable between 70 and 100 degrees of heat, that the worms pass through seven or eight evolutions, and yield more good crops than in either of those countries.

The silk of my last breed on the setting in of the rains, was like yours, much worse than ever I had seen it; nevertheless I made the boys wind it off as well as they could, and the silk weaver has twisted it into excellent thread, of which I am making a purse.

It is not only the damp and wet, but a foul air is likewise generated thereby, which kills the worms; and, as they decline in health, the quality of the silk is affected. However, although the rains have continued in a more violent degree than has been known for many years by past, by directing a greater attention to the neatness and airing

of the house in which they are, although likewise walled with mud, my present breed are perfectly healthy, and now spinning the most beautiful cocoons; I therefore trust that you will not be discouraged, but depend on a zeal and attention like yours, being crowned with uncommon success.

I have found nets to shift the worms from their litter, very convenient and useful, as it is only necessary to lay the net upon the worms, and fresh leaves upon the net; and as soon as they have fastened on the leaves, to remove them with the net to a clean basket.

In this way one person will do more, in clearing the worms from litter, and with greater ease, than twenty could, before the nets came into use. I am, &c.

Fort St. George, Dec. 1791.

*Dr James Anderson, to the honourable Sir Charles Oakeley, bart. acting governor, and council, Madras.*

HONOURABLE SIRS,

THAT you may not be insensible to the close attention so delicate a matter as the establishment of a silk manufacture requires, I have the honour to inclose a letter from Mr Andrews at Tritchinopoly, with my answer

I have likewise the pleasure to tell you, that captain Mackay at Arnee, is winding silk on a reel, which I sent him by a native who can use it,—and understand that Captain Flint still preserves the breed of worms which I sent Mr Anderson at Tiagar, as before stated.

The eggs distributed during the late hot season have hatched at several stations, as far as Palamcotta to the south, and Ganjam to the north, but lost again for want of accommodation.

You will see by Mr Andrews' letter, that mud walls are affected by rain; but I have devised a method which suits the nature of the worms in this climate all seasons of the year, and of the most easy construction, being no other than an extensive roof, supported on pillars, and walled round with bamboo matting, which is sufficient to break the force of high winds, without preventing the passage and circulation of air.

A Bungalo of this sort, in my garden, seventy feet in length, and fifty in breadth, is now employed with every advantage; and contains a complete establishment, as I have placed in it an upper servant, with a dozen children under his direction, a schoolmaster to teach the children to read, write, and keep accounts, and a silk weaver.

Some of the children are not more than three years old, and yet they feed the worms, and remove them from their litter, with the utmost care and attention,—so prevalent is the force of imitation on innocent minds.

The business of managing the worms, and winding the silk, requires no farther attention from me; as the latter is so well executed, that the silk weaver has reeled it off again, on bobbins, and spun it into thread.

I therefore recommend that you cause a similar lodgement to be erected, and a similar establishment made, at every one of the mulberry plantations, although I am sorry to observe a total neglect of the wells of water, the attention to which I so earnestly recommended.

I am, &c.

Fort St. George, Dec. 6. 1791.

*To be continued occasionally.*

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#### A PLAN FOR RELIEF OF THE INDIGENT BLIND.

The following plan for affording relief to a numerous class of men, who are incapable of earning their bread in the common way, seems to be so well calculated for effecting the object in view, that the Editor most cheerfully lends his aid to render it as generally known as possible; and begs leave to recommend it to his benevolent readers as an object highly meriting their attention. Any hints tending to render the plan still more perfect, will be thankfully received.

Of all the objects which daily call for the exercise of compassion, there are none more deserving of it than the *indigent blind*. Their uncomfortable situation being the immediate hand of God, is the more entitled to pity. Can we conceive a reasonable creature in more deplorable cir-

cumstances than to live in constant darkness ; to want daily bread ; to have no friend to give them lodging or support ; and to be obliged to have recourse to begging for the mere necessaries of life ? Can those who enjoy the inestimable blessings of sight, reflect for a moment on such a forlorn condition, and not have their gratitude awakened, and all their tender feelings excited ? Can any thing possibly be done, to alleviate the affliction of those of their fellow creatures who are deprived of sight ; and who would not be happy to contribute towards it ? Must it not be the most sublime pleasure which the mind can feel, to administer to the comfort of so unfortunate a class of the human species ? Institutions have been set on foot in different places, both at home and abroad, for the relief of the **INDIGENT BLIND** ; and it is proposed to establish something of the same kind in the city of Edinburgh, which, it is not doubted, will meet with universal approbation, and to which numbers only wish for an opportunity to contribute.

Three objects are to be aimed at in affording relief to the poor blind : *1st*, to furnish them with some employment which may prevent them from being a burden to society : *2dly*, that the employment be such, as gently to engage the mind, without fatiguing it, and by diverting their attention, to make them less a burden to themselves : and, *3dly*, that they be taught the principles of the Christian religion, which are so nobly adapted to afford consolation under their hard lot, and to render them easy and contented.

To answer these benevolent views, it is proposed to open a school for instructing the blind in music, if they shall be found capable of learning it ; and for teaching all of them the art of making whips, or some branch of the

cotton or linen manufactory, and instructing them in the doctrines and duties of Christianity.

As many may be disqualified, by age and infirmity, from learning any of these arts, and are incapable of doing any thing for their subsistence, it is proposed to afford them some pecuniary aid; in the distribution of which, particular attention will be paid to the moral character of the objects.

As soon as a fund can be raised, an advertisement shall be inserted in the newspapers, to call the indigent blind of this city and suburbs together, and ask which of them will accept the offer; and to distribute them into classes of learners of music, learners of mechanic arts, and such as are disqualified for any art.

That several rooms be engaged, one for the blind to be instructed in music, and the rest for those who are taught the other arts.

That those be selected who are likely to learn music, in such a degree as to earn their bread by it, or to teach others.

That spinets and fiddles be hired, during one quarter, for the blind to practise in their own houses; and a piano forte be procured for the room in which they are taught: after the first quarter, that spinets and fiddles be purchased for as many as are found capable of making proficiency, to be lent them till they have learnt their art, and then to be given them.

That when they are thoroughly instructed in music, and begin to gain a livelihood by it, it is proposed to give them a suit of clothes, and decent linen.

That some person who lives in family with the blind be taught to read and write music.

That the masters who are so generous as to offer their labour *gratis*, be paid something for their trouble ; and it is to be hoped that that pay will increase, when the good effects of the institution are seen.

That the musical pupils be likewise taught some mechanical employment, as an agreeable variety, and that they may earn something during the time they are learning music.

That all the blind be taught church music who are capable of it ; and it is proposed to have a sermon annually for the support of the charity, when the blind musicians and singers will display to their benefactors, their musical proficiency.

That the blind be supplied with work by the managers of the institution ; who are to pay to each artificer the whole gains arising from his labour.

That the most diligent receive rewards as an encouragement, such as clothes, &c.

That prayers be composed for the use of the blind, adapted to their peculiar situation ; and that they be taught these prayers, and other duties, every Saturday : that seats be provided for them, in one of the churches, where they may attend divine worship.

That after learning their trades for six months, the blind be incorporated into a society, each of whom is to contribute twopence weekly from his gains, as a provision for himself in old age or sickness ; that he may, when sixty years old, or disabled by disease, receive three or four shillings weekly, as the association box will afford. By an example of this kind, it is hoped that those lazy slothful poor, who enjoy the sense of seeing, and yet choose to live meanly on common alms, will be covered with shame, and excited to industry.

That an annual report be made of the expenditure of the money, and the good effected during the year; and when the institution is established, that their proceedings be published.

That the money collected be laid out on proper security, and trustees appointed for the management of it.

This establishment is intended for relief to the youngest of the blind, as soon as they can learn music, which perhaps may be at nine or ten years of age;—to the middle aged, by teaching them some art by which to entertain their minds, and to gain an honest living;—and to the old, who are unable to learn any thing, by affording them some assistance in clothes and money. One great object of the institution is to attend to the morals of the blind of all ages, especially the young.

Of late, an institution of this kind has been founded at Liverpool, where forty-three blind poor, of both sexes, have been engaged in different branches of manufactures, and earn, weekly, from 3s. to 6s. each. They appear very happy in this new method of spending their time. Eight are employed in making hunting, jockey, and ladies whips, which are sold for the benefit of the charity: thirteen blind women spin linen yarn, and reel it; another, totally blind from infancy, cuts out the cloth into shirts, sheets, and sacks, and makes it up: four blind girls and a boy learn to play upon the harpsichord; two make woollen mops; eight old people pick oakum for caulking ships; six make baskets and lampers, and cover bottles for exportation; and two make rope bears. Thus a class of our fellow-creatures, who were burdensome to their friends or the public, and unhappy because unemployed, are rendered useful members of society, and made happy in themselves, by being relieved from extreme poverty; and

what is worse than poverty, that languor and weariness of life, which must infest minds that are vacant, or employed only in brooding over their own misfortunes.

## TO CORRESPONDENTS.

THE observations of *Timothy Underproof* are received, and shall appear as soon as convenient.

The interesting communication by *W. W.* is come to hand, and shall have a place in due course. If the author could supply the date of the letter, and the name of the place where written, it would render it still more valuable. The other paper shall be sent as desired, with some private notices concerning it.

The Editor regrets that the elaborate performance with the signature *Antiphon* does not suit his miscellany. It will be left at the Office till called for.

*Rusticus* is rather too harsh in some of his expressions. His essay possesses merit; and if put into a more engaging dress it shall have a place.

The spirited letter of *W. S.* should certainly have had a place very early, were not the Editor determined to avoid altercation and long disputes. He agrees entirely with the writer, in thinking that it is premature to form a judgement, at present, as to the events to which his letter relates. It will be time enough to decide on the tendency of the measures now going forward after these troubles shall subside, when some light may clear up the chaotic mass which is in such high agitation at present. At that time, or on any other subject, the Editor will be glad of this gentleman's correspondence.

The verses by *Marina* are too defective in their present dress for publication. Why did not the friend of this young writer revise the lines, which are not destitute of merit, before they were sent away?

The Editor is much obliged to a *Shoemaker* for his obliging verses; but they are too highly complimentary for publication.

The lines by *Zachary Boyd* are received. That kind of burlesque does not suit the views of the Editor.



THE BEE,  
 OR  
 LITERARY WEEKLY INTELLIGENCER,  
 FOR  
 WEDNESDAY, SEPTEMBER 19 1792.

AN ACCOUNT OF THE SOCIETY OF ARCADIA AT ROME.

BY ABBE TOURNER.

*Continued from vol. x. p. 200.*

IN the republic of Arcadia, as in every other establishment calculated for the regulation of human affairs, experience discovered defects that were not foreseen. Great care had been taken to render the laws of Arcadia as simple and perfect as possible ; and it was hoped they would have tended to preserve unanimity among the shepherds for a long time ; but this was soon found to be impossible. As the progress of this society exhibits, in miniature, a very exact picture of what may be expected to occur in every other undertaking of the same sort, in which regulations, at first simple and easy, become complicated and difficult of execution, it will not prove unentertaining to trace it step by step, with a careful discrimination of circumstances.

In virtue of the first law, every Arcadian has a right to bring his complaints before the general assembly; but to avoid tumults it was agreed, that the complaint should be given in first to the *custode*, who was obliged to read it in the general assembly, although it should contain things against himself. All anonymous papers are rejected; only those are minded which are signed by the recurrent himself, and if the affair be of consequence; things of small importance are verbally received by the custode. However, as it did happen sometimes that individuals carried complaints, and had recourse to the community, without passing through the channel of the custode, disputes hence have arisen; and often the meeting broke up without any other conclusion, but the alienation of their former reciprocal affection.

The choice of a custode, mentioned in the second law, has several times given rise to disputes. Some pretended that at the end of each olympiad a new custode should be created, and that he might be removed even before the olympiad was out. The authority of the custode has been likewise contested; he being sometimes accused of being too arbitrary, at other times too negligent, at others too ambitious. The constant practice has been that the custode is obliged at the end of the olympiad to lay down his employment, consign the seal of the assembly, and the keys of the *Bosco Parrasio* to the oldest of the Arcadians then present, and divest himself of all authority, until, by secret ballot, it shall appear whether the same custode is to be chosen again or removed.

But the greatest blow the tranquillity of Arcadia ever had, was on account of the interpretation of the third law, in regard to the election of the colleagues. At the beginning of the institution of the *Arcadia*, the *custos* alone regulated all the business of the assembly; the number of the Arcadians increasing he called for an assistant, and the community decreed he might depute two *sotto custodi* at his pleasure. But even these two not being sufficient to undergo the trouble of giving intimation to the shepherds, or of going about to collect their opinions for the regulation of such business as might daily occur, the general meetings not being at that time very frequent, the custode was authorised to choose twelve of the most steady and most experienced Arcadians, to be changed every year, under the name of *vice custodi*; each of which was to direct a certain number of Arcadians, who, divided as it were into *centurie*, depended on the regulations of their centurion. A *pro custode* was besides added to the custode, who might assist him in his daily labours, act for him, and represent him in case of illness, absence, or any other urgency that might hinder him from attending to his employment. It was afterwards thought fit to subrogate the colleagues to the *vice custodi*, which latter title was bestowed upon the person who presided over any of the colonies. *Alfesibeo*, strictly to adhere to the letter of the law, *in orbem eligito*, &c. took six of the *vice custodi* of that year to act as old colleagues, and named six new ones. It had been thus practised for four olympiads, when in the year 1711, on the 15th of June, after the publication of the new six col-

leagues, *Eulibio Brentatiko* (*Paolo Rolli*\*, ) a young man of great vivacity, who had acquired much fame both in the public rehearsals, and in singing poetical compositions *extempore*, rose up against the custode, pretending he had not fulfilled the law, because amongst the six new colleagues, some had been named who had held that employment before. The complaint was neglected at first, as inconsistent with the consuetude; but *Eulibio* insisting, and a strong party forming in his favour; in order to adhere to what is ordered in the sanction of the laws, the opinion was asked of three experienced Arcadians, for the purpose of directing the general assembly to a more certain determination. These were *Opico Erimantéo*, (*Gr-*

\* *Paolo Rolli* a few years after left Rome. A cardinal who was his friend, sent to invite him to drink chocolate with him one morning; after talking of several things, the cardinal began to persuade *Rolli* that he should change air on account of his health. The poet was much surprised at this discourse, and much more on the cardinal's insisting on his going to another country for the benefit of the air, as he never had enjoyed better health. However, considering that the cardinal belonged to the *Inquisition*, and that his conscience reproached him for having uttered with imprudence, some free propositions in regard to religion, *Rolli* took the hint that his good friend had wished to give him, without revealing the inviolable secret of the *Inquisition*, immediately left Rome, and came over to England, where he was perhaps the first man of letters that undertook teaching Italian, and, if I were to except *Vincenzo Martinelli*, perhaps, I might almost say the last. While in England *Rolli* made an elegant translation of *Milton's Paradise lost* into Italian blank verse.

I am no stranger to the fame that *Barretti* has acquired among a few; but I am not, because of this, disposed to alter the above opinion. For this sufficient reasons might be assigned, were the subject deemed worthy of the attention of the reader; or were it not an ungracious task to point out the faults of any one. From these considerations I forbear to enlarge, though to have said less, I should have thought, would be blameable.

1792. society of Arcadia. 25  
vina) Corsido Alfejo, (Avvocato Antonio Collorotti,) and Mirtilo Dianidio, (Dr Pier Jacopo Martello,) who gave their opinion in favour of the plaintiffs; however, the general assembly having examined the reasons on both sides rejected this opinion, and ordered, that what had been customary should be observed.

Perhaps it may be thought that the desire, in some, of being distinguished by the rank of colleague, was the cause of this tumult, and of the schism that followed; and *Alfesibeo* took great pains to make it appear so in the narration he has introduced of it in his work, *Stato della Basilica di S. Maria in Cosmodin, &c.*; but these disturbances are to be traced from an entirely different source.

*Alfesibeo*, with the approbation of the general assembly, having compiled the laws, which were put into Latin by *Opico*, the commission was given to the latter to prepare a Latin oration to be repeated on the occasion of the promulgation of the laws. He could not avoid shewing it to the custode, who thought that *Opico* had made use of some expressions, which seemed to import that he not only was the author of the Latin version, but likewise of the compilation of the laws. It was therefore read in the general assembly, who ordered several corrections, which *Opico* promised to fulfil; but when the day came for the promulgation of the laws, he repeated it without any of the proposed alterations. This behaviour of *Opico* displeased not only the custode, but the greatest part of the Arcadians. The misunderstanding increased, when a few days after, *Opico* distributed his Latin *Opuscula*, amongst which were the laws

of Arcadia, followed by the oration, with the title, ' *J. Vincentii Gravinae, inter Arcades Opici Erymanthaei, pro legibus Arcadum oratio* ;' which he several times reprinted without ever changing any thing, as if it had been admitted by the assembly. In consequence of such proceedings the college newly instituted called *Opico* to give an account, who not being able to deny any circumstance that was laid to his charge, promised to make a new edition of the oration, to which he was to prefix a declaration that the laws were not his production, and that he only dressed them in the Latin garb. This declaration was presented by him, and is still to be seen in the *serbat ojo* or register office of Arcadia. The custode and the college were satisfied with the readiness of *Opico* ; but whether it was involuntary neglect or determined contumacy, it seemed he never more thought of it ; moreover, whenever he talked of the laws of Arcadia with his friends, he always hinted his being the author of them, and he explicitly says it in a letter to *Orildo Berenteatico, (Marchese Scipione Maffei.)*

These disagreements, by little and little, alienated the minds of *Opico* and *Alfesibeo*, so that there was not any longer between them the former cordiality. It may be added to all this, that the authority of custode having increased, so as to have become in the opinion of several a reputable place, many began to aim at it ; nor was every one pleased that *Alfesibeo*, by repeated elections, should be a perpetual custode. *Opico*, who was indeed a man of greater knowledge and parts than the most in his time, invited to his house a band of young men of great brilliancy

of genius, and ardour for study, who gave very promising hopes, of becoming, one day, by his instructions, great luminaries of literature ; so that several of the Arcadians, of a more mature age, delighted to meet with them in *Opico's* habitation ; and to encourage them more, had them, by little and little, received amongst the Arcadian shepherds, until their number increased so much as to begin to give suspicion to the custode, and make him very jealous and attentive. Hence he took care to keep out of the number of the colleagues those young men of *Opico's* band ; and hence the opportunity was taken for the complaint by *Rolli*, coloured with an apparent zeal for the observance of the laws.

The general assembly decided in favour of the consuetude, and *Alfesibeo's* party triumphed in that day, which kept in suspence the greatest part of Rome. The reclaimants were received and favoured by *Aquilio Naviano*, (*Don Livio Odescalchi*, duke of Bracciano, &c.) who made to them a donation of a garden, out of the *Porta Flaminia* or *del Popolo*, where, after having chosen *Aquilio* for their perpetual custode, they pretended to constitute the true *Arcadia*, and continued to act in all respects as *Arcadians*. The two parties went to law. The greatest number of the Arcadians were unanimous, and constant in dissenting from the schism ; and, excepting very few, who chose to remain indifferent, all the others declared, in writing, their fidelity to *Arcadia*, and perpetua war to the schism ; the colonies especially shewed their particular zeal, many of which had been strongly solicited by the schismatics.

The law suit lasted three years, when *Aquilio* died, and the schismatics finding they were very near losing their cause in the court, made a legal renunciation of the suit, and pretensions; and laying aside the name of *Arcadia nuova*, they assembled under the name of *Academia Quirina*, in the gallery of cardinal Lorenzo Corsini, who was afterwards pope Clement XII. by whose influence they had given up their pretensions. Thus Arcadia recovered its tranquillity which has ever after been undisturbed.

I must observe to you, that the unanimity of the Arcadians has always been insurmountable in inviolably observing that part of the law which hinders the Arcadians from having a patron; for when *Arete Mellro* (John v. king of Portugal) was acclamated, he sent a present of four thousand crowns to the *Arcadia*, and an offer to be their patron; they received the present, which was employed in buying the present place where the *Bosco Parrasio* exists, but they made the royal shepherd understand it was against the laws of Arcadia to have a patron.

It has not been possible to observe the tenth law as strictly as it was intended, on account of the great number of the Arcadian shepherds, for whom there could not be kept a fixed number of lands, which, on the contrary, have been increased, and the denominations taken not only from the country of Arcadia, and the neighbouring provinces, but this imaginary dominion has been extended to all those countries that have belonged to the Greeks, even at the time of the Macedonian empire under Philip, Alexander, and their successors.

*To be concluded in another article.*

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## HINTS RESPECTING THE GENERATION OF CERTAIN KINDS OF FISHES.

*Respectfully addressed to the readers of the Bee in India,  
for farther elucidation.*

FEW objects can be more interesting to man than the history of nature ; and in that department, one of the most curious of its branches is that which respects the generation of animals, and the circumstances that tend to accelerate the growth, or shorten the natural period of existence of animated beings.

That there are many modes of generation which are unknown to us, and which differ very much from that with which we are best acquainted, I have no sort of doubt, as well as of shortening or protracting the usual existence of animate beings. The procreation of polypi, of earth worms, and of some kinds of serpents, are examples of the former ; and the preservation of snails alive for many years, during which time their vital powers have been entirely suspended, affords a striking example of the latter.

But an anomalous case respecting the generation of certain kinds of fishes, which has been reported to me by various persons who have been in India, has appeared to me so contrary to the ordinary course of nature, that, without disputing the facts, I choose to suspend my belief in them, till I shall have such authority as shall remove all kind of scepticism on that head. It is with that view I take this mode of applying to the readers of the Bee in India, for farther

elucidations respecting this very curious subject; and with that view I shall state plainly the facts that have been reported to me concerning it.

About four years ago I was told by a gentleman, who had not himself been in India, that, at Bombay, he had been assured by several persons who had lived there a considerable time, that no sooner did the rainy season set in, so as to form pools of water in hollow places, which had been for many months quite dry, than the natives used to go out and catch great quantities of a certain kind, or kinds, (I cannot be positive) of fishes, which were eat by all the people with great avidity. They all assured him this was a fact universally there known; they asserted that these fishes were found in every pool of water, most of which had no sort of communication with river water or overflowing tanks, but had been formed entirely by rain that had fallen from the clouds.

This appeared to me so romantic a story that I did not venture to mention it to any person for a long while; nor did I even think it afforded foundation sufficient for troubling any of my correspondents in India about the matter.

At length I ventured to mention the subject to a gentleman who had been some years in India, as a wonderful story I had heard, but to which I attached no degree of credit; and to my no small surprise he assured me the fact was so,—said he had often eaten of the fish himself; and described them as being a small fish, very like the European minnow, but different from it in some respects: he said they were caught in vast quantities, not only on the island

of Bombay, but every where on the Malabar coast, in the same manner.

Encouraged by this circumstance, I ventured soon afterwards to ask at a gentleman who had resided in India for nearly twenty years, in the medical line, if ever he had heard of a fact of this nature. He told me it was perfectly true. That in the neighbourhood of Madras, he had often seen the blacks go out, in a day or two after the rains had commenced, to the adjoining fields, now full of pools of water, to catch fish in them, and that they always returned with abundance. That he had often eaten of these fish, which were very good: He described them as a short flat kind of fish, not of the nature of a flounder, but rather resembling a John Dorie, having the thin edges, not the flat side, above and below when swimming. Since then, I have conversed with two other gentlemen from India, who talk of this as of a thing, universally known, though they never had particularly investigated the question.

These concurring testimonies, though not sufficiently precise to afford satisfaction, seemed to me sufficient data for instituting an inquiry respecting this extraordinary phenomenon. I suspect there must be some inaccuracy or exaggeration, which, if fully explained, might serve to abate something of the marvellous of this account; and I own I should be very glad to have the matter so stated as to have precise ideas on the subject.

Though all the persons above named agreed respecting the fact of fish being actually caught in pools of rain water, in a few days, at the most, after the

rain began to fall, and of such a size as to be fit for the use of man, they differed as to the kind of fishes caught, though each of them seemed to know of only one sort. The first said it was a long and small fish, though not of the nature of an eel, yet approaching towards it in shape. The other two described them as above, and the others had not paid such particular attention to them as to be able to speak with any degree of certainty. This, and other circumstances, convinced me that none of the gentlemen had remarked this phenomenon with the precision of naturalists. None of them even seemed to know if the fish thus caught were to be found in that country at other times in the tanks or rivers ; or if they were caught only in the particular situation above described, though they all seemed inclined to be of this last opinion, as they never remembered to have seen them at any other season. An inquirer is often subjected to great inconveniences from the inaccuracy of the observers who furnish him with information.

They were all, however, quite positive that these fishes were found in abundance, in pools that were formed entirely of *rain* water, without any communication with tanks or rivers. If this fact should be clearly proved, it would open up a field for curious speculation to the naturalist. Even on the supposition that the kinds of fish thus caught were found in Indian tanks or rivers, the elevating the spawn of such fish into the air, by means of the vapours exhaled by the sun, would be a phenomenon of which we are acquainted with no other parallel in nature. If we could suppose the spawn thus carried into the at-

mosphere, (a phenomenon which I leave natural philosophers to admit or deny the possibility of,) could we suppose that in the moist warm atmosphere, so favourable for the production of animal life, that spawn could remain there for several days, or weeks, or months, without being brought into life; and if the fish did come to life in the atmosphere, would they not be found on the tops of houses, in the streets, and wherever the rain fell, in their animal form? This is not alleged to have been observed in any instance but one, which happened at the *Mount* near Madras many years ago, when it was said to have rained actual live fishes. The very remarking this, like showers of blood in Europe, shows, that if ever such a phenomenon occurred, it was at least a great rarity; the other is represented as being not only common, but invariably the case.

To suppose they were raised by water spouts, or whirlwinds, would be absurd; because, from our data, the fish are to be found for certain at all times, and in all situations, when the rainy season sets in. Water spouts and other similar phenomena seldom occur. The fish too thus raised might be of many sorts, and different sizes; from the sea, a hundred times more likely than from the land.

Some gentlemen with whom I have conversed on the subject, willing to suppose the fact to be as above stated, have tried to account for the phenomenon in various ways. Some of them have supposed that there may possibly be some animal of the fish kind endowed with the power of existing during a long period of dry weather in the earth; and that they

buried themselves in that earth as the water gradually wasted away, where they remained concealed till the return of water brought them from their lurking places. It is well known, that, in Europe, eels have been known to exist a considerable time in stiff mud, where no water was to be perceived: and there is a sea fish of the shark tribe, often caught by the natives of the western isles of Scotland, there called *blind hove*, which has the power of existing for a long while without any water. It is a very common practice to carry these fish home alive, and put them in a corner of the house where peat for fuel is kept, and in which place there is usually a large heap of loose dry peat earth, that has crumbled down in time, which they call peat dross. Into this place they throw the fish, which bury themselves in the dross, and there continue alive till the family have occasion to use them as food, when they are gradually taken out as wanted, and dressed for table. These fish I myself actually saw alive in that situation in the house of John Campbell, esq; of Jura: I was told they would thus live for several months.

Others have supposed that there may be some animal of the fish kind, capable of existing for a long period of suspended animation, in certain circumstances, similar to what we know does actually happen with the beaver, marmotte, and some other terrestrial animals in Europe. If so, these animals, they think, might remain torpid during the *dry* season in India, as our animals do during the *cold* season in Europe; and being endowed with a similar instinct, they might prepare for the change by burying them-

selves deep in the ground, in nests formed for the purpose. Snails we know have the singular power of continuing in life for many years. The animals though kept in a cabinet perfectly dry, and apparently dead during the whole time, yet recover life when placed in circumstances favourable for it.

These hypotheses are ingenious; but how far either of them are *just*, remains to be proved; one great objection however occurs to both of them, *viz.* if these animals did actually bury themselves, and remain in the earth during the dry season, it must happen that they would often be found in that kind of torpid state in the earth. In no country of the world is the surface mould more apt to be examined than in India, where the business of digging tanks is so generally and universally practised, on a very large scale; and as these tanks will naturally be dug in the hollow places, where the fish would most abound, it must happen that their nests would thus be frequently discovered during these operations, if such did really exist. But none of my informants had ever heard of any thing of this sort.

Another way in which we might suppose it possible that this phenomenon could be produced, is, that if fish by any accident should once be brought into these pools, which we can conceive might happen in innumerable ways; and supposing the spawn of these animals, like the seeds of plants, or the eggs of insects, to remain without life until circumstances became favourable for their germinating, it might so happen that the spawn which was emitted immediately before the dry weather set in, being left deprived of the necessary mois-

nure during the dry season, might retain its germinating quality, so as to become young fish on the first fall of the rain, as the silk worm's egg in the northern parts of Europe hatches immediately on being exposed to the heat of the summer's sun. In this case nothing would be wonderful but the sudden growth of the fish to a size fit to be eaten, in so short a time after the rainy weather sets in. But as we know that, even in Europe, the growth of a young salmon, at a certain period, is amazingly rapid when compared with most other animals, and as vegetation in India during the rainy season, far exceeds any thing we here experience, we can form an idea of animal growth being, in certain circumstances, proportionally rapid. According to this hypothesis there seems to be nothing contradictory to the usual course of nature at least, and nothing that could be deemed to approach towards the miraculous.

On this supposition, however, one difficulty requires to be removed. In this case it must happen, that when the pools of water are dried up, the fish which had not been caught must be found left dead upon the surface of the ground. And, in some cases, unless the natives be peculiarly assiduous in catching them, these must then be thus found in considerable quantities. My informants took no notice of this circumstance.

In short, we in Europe may form conjectures on this subject; but it is those who are in India only who can observe the facts. I shall therefore deem it a particular favour if any gentleman in India, into whose hands this may fall, will have the goodness to

state the facts as distinctly as possible, and to explain the circumstances that may probably have given rise to the opinion, if it shall be found to be erroneous; or if it be true that fish be really caught in these circumstances, it will be accounted singularly obliging, if the kind, or kinds of fish, thus found, be enumerated, their size and natural history, as far as it is known, given; and, if possible, figures of these animals. It is highly probable that when all matters are fairly stated, much of what appears *wonderful* in this narrative will disappear.

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### MISCELLANEOUS OBSERVATIONS.

SIR, *To the Editor of the Bee.*

IN one of your late numbers we were favoured by your correspondent Albanicus with an elaborate panegyric on professor Stuart's *elements of the philosophy of the human mind*. The panegyric however was not more elaborate than just; if Socrates was preferable to all his predecessors in science, chiefly because he laboured to turn the attention of speculative men from obstruse inquiries, which few understand, and in which few were interested, to the business and manners of common life, much of the same merit belongs to Mr Stuart. More than one of his contemporaries perhaps may vie with him in profundity of thought, in accuracy of discrimination, and in beauty of arrangement; but I know not that I have ever read a metaphysical writer so generally intelligible, and so fraught with ingenious observations, equally instructive to the philosopher, the politician, the merchant, the mechanic, and even to the farmer.

Among a number that might be selected, the following remarks on the ' effects produced on the memory by committing to writing an acquired knowledge,' appear to me to deserve the attention of every reader of your useful miscellany.

' The utility of writing, in enabling one generation to transmit its discoveries to another, and in thus giving rise to a gradual progress of the species, has been sufficiently illustrated by many others. Little attention however has been paid to another of its effects, which is no less important; I mean to the foundation which it lays for a perpetual progress in the intellectual powers of the individual.

' It is to experience, and to our own reflections, that we are indebted for the most valuable part of our knowledge; and hence it is, that although in youth the imagination may be more vigorous, and the genius more original than in advanced years, yet in the case of a man of observation and inquiry, the judgement may be expected, at least as long as his faculties remain in perfection, to become every day sounder and more enlightened. It is, however, only by the constant practice of writing, that the results of our experience, and the progress of our ideas, can be accurately recorded. If they are trusted merely to the memory, they will gradually vanish from it like a dream, or will come in time to be so blended with the suggestions of imagination, that we shall not be able to reason from them with any degree of confidence. What improvements in science might we not flatter ourselves with the hopes of accomplishing, had we only activity and industry to treasure up every plausible hint that occurs to us ! Hardly a day

passes, when many such do not occur to ourselves, or are suggested by others ; and detached and insulated, as they may appear at present, some of them may perhaps afterwards, at the distance of years, furnish the key-stone of an important system.'

To the truth and importance of these observations, the experience of every thinking person, in every station of life, will bear ample testimony ; at least I must confess that many hints have occurred to me, which, by having neglected to commit them at the instant to writing, I have now irrecoverably lost, and which yet I would give a great deal to recal. The professor, as was natural, instances particularly the improvements in *science* which might be expected from treasuring up every plausible hint which occurs, or is suggested to us ; but I think it is obvious that equal improvements might be expected from the same practice in every useful art of life.

It is recorded of one of the most learned divines and eloquent preachers of the last century, that his method of composing his weekly discourses was, after every sermon, to revolve upon the ensuing subject ; that being done, to pursue the course of study in which he was engaged, and to reserve the close of the week for the provision for next Saturday. By this practice not only a constant progress was made in science, but materials were unawares gained into the immediate future week. For he said, be the subjects treated of ever so distant, somewhat will infallibly fall in conducive to the present purpose.

Were the farmer, the mechanic, the tradesman, &c. to adopt a practice somewhat similar to this, it is not perhaps easy to be conceived how great im-

provements might be made by each in his proper department. When a man is engaged, however eagerly, in a particular pursuit, ideas will sometimes dart into his mind, which though but slightly related to the present subject, may be striking in themselves, and may lead to important discoveries. Of these no immediate use can be made, because a wise man will never interrupt a regular train of thought in order to trace detached ideas through all their possible consequences. They must therefore be thrown aside till a time of more leisure; and if they be not committed to a safer repository than the retentive memory, they are not likely to be found when they shall be next wanted.

Thus evident is the advantage which would result to every individual from the practice of committing such thoughts to writing; but instead of recommending the general use of common place books, which when properly kept are indeed valuable companions, I could wish that THE BEE were occasionally employed for this purpose. The man of science, the farmer, the manufacturer, or the mechanic, who should send to your miscellany such plausible hints as at the time of their occurring to him he was not at leisure to pursue, might afterwards, by means of your accurate indexes, find them as easily as if they had been repositioned in his own manuscript. He would thus fully obey the professor's excellent directions for his own improvement, and would at the same time contribute to the improvements of others. By making his common place book public, he would render it more useful even to himself, than it could be if exposed to no eye but his own. To you, Sir, I need not say how

apt we all are to over-rate the importance of such hints as occur to ourselves, and in consequence to waste our time in barren pursuits. By adopting the method which I have ventured to recommend, this mischief would be in a great measure prevented, as the real value of our hints would be ascertained by judges less partial than the fond discoverers. I am, &c.

E. O. I\*.

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### ON BEES.

SIR, *To the Editor of the Bee.*

HAVING in a former letter endeavoured to express my admiration of the good *taste*, *hardibood*, and *critical abilities* of your Old Correspondents, permit me now to say a few words to the *Young Observer*. He talks very plausibly, and, I doubt not, his observations are in general very just. But I am of opinion he has not paid due attention to the bees (see vol. vi. page 253, &c.) I would like to know how he learned that the bees fall into a torpid state in winter. From what he says of the hedge hog, &c. it appears he allows animals in a torpid state take no food. Bats and swallows, when found in a torpid state, are mo-

\* The Editor is much obliged to the ingenious author for the above hints, which perfectly coincide with his own ideas. Should he find that his correspondents take the hint, he will appropriate a part of the Bee to that purpose, under the title of the *miscellaneous repository*, and take care to specify the particulars in the index as distinctly as possible. Still farther to forward this object, should he find it meet with the approbation of the public, he will publish at the end of every three years, a connected index of the preceding eighteen volumes, to be distributed *gratis* to the purchasers of these volumes. This will tend to correct one of the greatest defects of a common place book, the difficulty of finding a particular article when it is wanted.

tionless and apparently without life. In a house in my neighbourhood, a bat, in its torpid state, in January fell down among some clothes, and being taken up, and carefully laid up among some tow in a convenient place, it continued in its torpid state, and without food near three months, and revived some time in April, and was then set at liberty. But the bees, I apprehend, are never in a torpid state in this sense. They cannot bear the winter's cold without a cover, and therefore are crowded together in their hives, and have little room to dance and play; but they hum I suppose, except in the night when they are asleep, and feed in the winter upon the provision stored up by their industry in summer. A hive, it is supposed, cannot be kept safely through winter, that does not weigh upwards of thirty-two pounds, of which the hive (scape) weighs but six pounds; and besides consuming this provision, they must be fed in the spring if the severe weather continues long. It is a common saying, in Forfarshire, and perhaps in other places, that the bees sing on Christmas morning; this, however, is probably no more than they do every morning. On last Christmas morning I desired some to listen to the song of the bees; and though there was a severe storm, they told they heard them hum very distinctly. To answer the Young Observer's queries concerning bees, therefore, would, I think, be building on the *baseless fabric of a vision*\*.

#### YACKSTROTTE.

\* I should suspect that the doubt will be, whether the opinion of the Young Observer or Mr Yackstrotte, be the greatest vision. Many things that have been long generally admitted as facts, I know have been found to be false;—perhaps the sleep of the bees, during cold weather in win-

SIR, *To the Editor of the Bee.*

IN your Bee for 25th July last, I have read an answer to my essays by Misobrontes. I do not intend to give him a reply at this time, which does not arise from any dread of your correspondent, any disrespect for your readers, or any want of personal gratitude to yourself, for your long and patient insertion of my trifles,—another reason is satisfactory. For sometime past I have been engaged in collecting, enlarging, and reprinting some of these letters, with many additions, and several other essays which had never appeared before, and the whole will be advertised in a few days, in a large pamphlet, intituled, *The political progress of Britain*. Of this you shall have a copy, that if you judge any passages worth an extract, they may at your convenience be taken. For the literary property of the work is of no consequence to me, providing that I can disseminate my ideas, and convince my countrymen of the madness and stupidity of the war system. In this performance your friend will see so many additional, and, as I believe, unanswerable arguments, as may perhaps stagger him.

I am sorry to see that Misobrontes has inadvertently quoted two or three passages as mine which are either, may be one of these. But more accurate experiments than this adduced by our correspondent, will be required to overturn this general opinion. I will be glad to have this matter more fully elucidated by any of my readers who have had, or who may have, opportunities of making experiments on this interesting subject. Perhaps those in Russia, and other northern continental countries, who find more profit in rearing bees than we do, will be able to ascertain this question in a more satisfactory manner than can be done in Britain. From the manner in which Yackstroffe writes, it is very evident he is not deeply versant in the management of bees.

*Edit.*

the fruits of his own *inaccuracy*. I employ this expression because I am unwilling, and unauthorised to charge him with any settled intention to deceive.

In my second letter, when speaking of James I. I have said, “ had it been possible that the life of such a prince, and the tranquillity of this country, could have been prolonged to the present day, it is beyond the power of British vanity to conceive the accumulated progress of British opulence.” When this sentence is to be quoted by Misobrontes, he first mangles and interlines it, and then perverts it to a different meaning. I shall not take up your time by quoting him, as the paper is already in the hands of your readers.

Again, he charges me with saying that lord Chatham was “ the *worst* minister that ever any nation was cursed with.” I never said or thought any such thing ; to quote falsely is perhaps the worst infirmity that any author was ever cursed with. I said, and I adhere to my assertion, that “ with a more destructive minister, no nation was ever cursed ;” that is to say, that no minister ever spent public money faster. But to call him the most prodigal of statesmen, or the worst of ministers, was a piece of folly reserved for Misobrontes.

Again, he accuses me with terming “ Walpole the best of ministers.” He is himself the first person that ever said so.

Laurencekirk, }  
Sept. 3. 1792. }

TIMOTHY THUNDERPROOF\*.

\* The Editor will admit a reply from Misobrontes if he desires it, if short and written with moderation ; and here he hopes the altercation will end.

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POETRY.

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THE KING'S BIRTH DAY AT AVON PRINTFIELD, 1792.

*For the Bee.*

LIKE ither bards right fain I'd sing  
The great birth day o' Britain's king;  
But that it will me right sair ding  
I've cause to rear;  
For book-lear'd chaps wi high flown wing  
Sings't ilka year.

When Musie kend o' the affair,  
She grew as mad as a March hare;  
Quo' she ye are haff daft an' mair,  
Ye senseless coof;  
That subject's worm, just as thread bare  
'S a body's loof.

Gie o'er your sang, continued she,  
An dinna ye affront me sae;  
Gleg Burns, an twa three bardies mae,  
The theme wad hit;  
But you, ye hardly ken a B  
Bi a bull's fit!

It to my heart gade wi' a dunt,  
To think the cuttie had the strunt;  
Says I, ye crabbit mislear'd runt,  
Gif I draw breath,  
This day ye soll Pegasus munt,  
As shure as death.

When that she heard me crack sae crouse,  
She grew as caum as ony mouse;  
Syne look'd sae pleasant and sae douse,  
An' nae mair snarl'd;  
That now I dinna care a louse  
For a' the wold.

Come then, my winsome, dautit lamb!  
An' I se gie you a gude Scots dram  
O' aquavitæ; just the sam  
I tak myself;  
Whether it mend your milk or dam,  
Ye need na tell.

Sing on this morn, before the sun  
To spael the lift has yet begun,  
Wi hearts sae overjoy'd wi' fun,  
We canna sleep;  
But up an' to the fields we run,  
By day light peep.

Lang may we bruik sic happy hours,  
 To stray 'mang braes, an' bogs, an' bow'rs,  
 On king's birth day to gather flow'rs  
 To busk our winnocks;  
 Content an' this be still our dow'rs,  
 Wi' claise an' bannocks.

Here rowth o' flow'rs by nature grow,  
 Nae art's requir'd to gar them dow' ;  
 Ye gods! what blessings ye bestow  
 On thankless man ;  
 O keep us frae the auld boo-kow,  
 As lang's ye can.

Now glorious Samuel, Avon's brag,  
 On sic occasions never lag,  
 By day break rear your painted flag,  
 An' flag staff baith ;  
 I wat it is nae tatter'd rag,  
 But good hale claih.

O Avon field ! thrice happy place !  
 This day there's nane o' Adam's race  
 Within thee wears a dowie face,  
 For a' are happy ;  
 God grant it lang may be your case,  
 Ay hale an' cracky.

At height o' day the blood-red wine,  
 In cristal glasses sparklin' shine ;  
 Upon my word it's really fine,  
 Only to see't ;  
 But by my saul it's nine times nine  
 Better to prie't.

Syne first o' a' we toast the king,  
 The niest in order is the queen,  
 The prince o' Wales the heir I ween  
 O' Britain's crown,  
 The royal family bedeen,  
 Their healths gae roun.

An' patriotic chiels beside,  
 That lo'e auld Britain's yird and tide,  
 Our breast fill'd fou o' loyal pride,  
 Their fealty shaws,  
 Till hill an' dale at distance wide,  
 Ring wi' huzzas.

Gin our gude king was here himself,  
 To see our chops an' hear our bell,  
 An' how ilk tongue sae snack an' snell,  
 Loud touts his famt ;  
 I'll wad a plack, here he wad dwell,  
 An' ca't h's name.

You Lunin town an' Embrugh baith,  
 Aft bloodie scenes o' dirt an' death,  
 On days like this; had in your wrath,  
 An' social be;  
 At Avon feint a ane wad skaith  
 A very flee.

To beet the joys o' this day's sport,  
 Our masters, Lord reward them for't!  
 Gie us a fouth o' the best sort  
 O' barley broe,  
 That maks the time seem wond'rous short  
 An' cheary too.

As soon's we get our mid-day meal,  
 O' bread an' butter, milk or kail,  
 Then shanks that ken na how to fail,  
 On king's birth day,  
 Upon a floor weel laid wi' dail,  
 Hard reels away.

Keen Frazer rubs his fiddle strings,  
 His elback flees as it had wings;  
 Rae at the bass wi' vigour clangs,  
 An' weel he plays,  
 While voices at the punch bowl sings  
 King George's praise.

The damsels clean, an' trig, an' fair,  
 Frisk thro' the reels wi' rural air,  
 Nae wanton look, nor bosom bare,  
 To temp the younkers,  
 Here flesh and blude may safely stare,  
 As if at Blunker's \*.

Then young, an' auld, an' middle age,  
 Far frae their cares quite thrang engage;  
 Whilst harmles mirth an' pleasure rage,  
 How great the bliss!  
 Hech! life wad be a funny stage  
 Were't ay like this.

Sic pleasures maun through time gie way,  
 Nane need expeck they'll last for ay;  
 The Lass that opes the yetts o' day,  
 Wi' faithfu' heart,  
 Keeks in wi' halesome smiling ray,  
 An' bids us part.

Frae her sweet face nae mair we crave,  
 But just ae dance that dings the lave,  
 Bab-at-the-bouster, then we have,  
 Withouten fail,  
 Where a' partakes, baith gay and grave,  
 An' syne we skail.

\* An ugly old fellow of the place.

Now Musie ye hae done fu' weel,  
 Some ither time 'us twa may speel  
 Up to Parnassus wi' a wheel;  
 An' view its tap;  
 But first and foremost or we speel,  
 We'll tak a nap.

I. K. PRINTER AVON FIELD..

A FRAGMENT.

*For the Bee.*

I.

KEEN blaws the wind o'er Donocht head,  
 The snaw drives snelly through the dale,  
 The gaberlunzie trills my sneck,  
 And shiv'ring tells his wæfu' tale.

II.

Cauld is the night;—O let me in!  
 And dinna let your minstrel fa;  
 And dinna let my winding sheet  
 Be naething but a wreath o' snaw.

III.

Fu' ninety winters hae I seen,  
 And pip'd whare goroochs \* whirring flew;—  
 And mony a dance ye've danc'd I ween,  
 To hilts which fræ my drone I blew.

IV.

My Eppy wak'd, and soon she cried,  
 Get up gudeman and let him in;  
 For weel ye ken the winter night  
 Was short when he began his din.

V.

My Eppy's voice, O wow it's sweet,  
 E'en though she bans and scaulds a wee,  
 But whan it's tun'd to sorrow's tale,  
 O but it's doubly sweet to me!

VI.

Come in auld carle, I'll stir my fire,  
 I'll mak it bleeze a bonny flame;  
 Your blude is thin, ye've tint the gate,  
 Ye shou'd nae straÿ sae far fræ hame.

VII.

Nae hame have I, the minstrel said,  
 Sad paity sare o'erturn'd my ha',  
 And weeping at the eve of life,  
 I wander through a wreath o' snaw.

*Cetera desunt.*

\* Or *gercecks*. An explanation of this word will be very obliging.

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ANECDOTES OF ARTEDI, THE FAMOUS SWEDISH NATURALIST,  
WITH SOME ACCOUNT OF A NEW EDITION OF HIS WORKS BY  
M. WALBAUM.

THE public are indebted to Linnæus for the following interesting memoirs of his friend and fellow disciple Artedi, a name well known to the lovers of natural history. These extracts are made from a Latin edition of Artedi's works, just published by Dr Walbaum of Lubeck, in three volumes quarto, with plates. These anecdotes are written with that warmth which was natural to Linnæus, and adds one more to the numerous list of examples that are before the public, of the hard fate that too often marks the private life of philosophers.

John Artedi was born in the year 1705, in the province of Angermania in Sweden. He inherited from nature an ardent passion for all branches of natural history, but he excelled particularly in what respects fishes.—In 1724, he came to study at the university of Upsal. “In 1728,” says Linnæus, “I came from Lund to Upsal. I wished to devote myself to medicine. I inquired who, at that university, excelled most for his knowledge; every one named Artedi. I was impatient to see him. I found him pale, and in great distress for the loss of his father, with his thin hair neglected. He resembled the portrait of *Ray*, the naturalist. His judgement was ripe, his thoughts profound, his manners simple, his virtues antique. The conversation turned upon stones, plants, animals; I was enchanted with his observations, equally ingenious and new; for at the very first, he was not afraid to communicate them to me with the utmost frankness. I desired his friendship, he asked mine. From that moment we formed a friendship,

which we cultivated with the greatest ardour for seven months at Upsal. I was his best friend, and I never had any who was more dear to me. How sweet was that intimacy ! With what pleasure did we see it increase from day to day ! The difference, even of our characters, was useful to us. His mind was more severe, more attentive ; he observed more slowly, and with greater care. A noble emulation animated us. As I despaired of ever becoming as well instructed in chemistry as him, I abandoned it ; he also ceased to study botany with the same ardour, to which I had devoted myself in a particular manner. We continued thus to study different branches of science ; and when one of us excelled the other, he acknowledged him for his master. We disputed the palm in *ichthyology* ; but soon I was forced to yield, and I abandoned that part of natural history to him, as well as the *amphybia*. I succeeded better than him in the knowledge of birds and insects, and he no longer tried to excel in these branches. We marched together as equals in *lithology*, and the history of quadrupeds. When one of us made an observation, he communicated it to the other ; scarce a day passed in which one did not learn from the other some new and interesting particular. Thus emulation excited our industry, and mutual assistance aided our efforts. In spite of the distance of our lodgings, we saw each other every day. At last I set out for Lapland,--he went to London. He bequeathed to me his manuscripts and his books.

" In 1735 I went to Leyden. I knew not what was become of Artedi. I thought he had been in London. I found him there. I recounted my adventures ; he communicated his to me. He was not rich, and therefore was unable to be at the expence of taking his degrees in medicine. I recommended him to Seba, who engaged him to pub-

lish his work on fishes. Artedi went to join him at Amsterdam.

“ Scarcely had I finished my *fundamenta botanica*. I communicated it to him; he let me see his *philosophia ichthyologica*. He proposed to finish as quickly as possible the work of Seba, and to put the last hand to it. He showed me all his manuscripts which I had not seen: I was pressed in point of time, and began to be impatient at being detained so long. Alas! if I had known this was the last time I should see him, how should I have prolonged it!

“ Some days after, as he returned to sup with Seba, the night being dark, he fell into the canal. Nobody perceived it, and he perished. Thus died, by water, this great ichthyologist, who had ever delighted in that element.

“ I learned his fate—I flew—I saw his melanoholy remains. I shed tears: at last I resolved to preserve his glory, and to fulfil my engagements. I procured his papers with a good deal of difficulty from his host, who wanted to sell them by auction. *Mr Clifft* bought them, and gave them to me. In spite of business, with which I was then overwhelmed, I stole from it the time that was required for revising the works of my unfortunate friend. Who could better *edit* his works than him who was full of his stile, of his ideas, of his method and manner? I passed six months in Holland to complete this edition; happy, if I have been able properly to fulfil this last duty to my friend, and to secure an eternal fame for him, who was carried off by such a premature fate. I shall rejoice in having snatched from oblivion, the greatest work of that kind which exists. Artedi has rendered that science the most easy of all, which before his time was the most difficult.”

Thus, does the republic of letters owe to Linnæus this elementary treatise on fishes. But as the edition of Linnæus was not now to be had, having been published in the year 1738, Mr Walbaum has now presented a new edition of the whole of Artedi's works, with a supplement containing the discoveries that have been made in that branch of natural history since his time.

The first volume of this new edition, which was printed in the year 1788, contains the *biblioteca ichthyologica* of Artedi, which contains the literary history of that science, commencing several years before the Christian æra, and comes down to our own time.

The second, which was published in the year 1789, presents the *philosophia ichthyologica* of Artedi, improved by Walbaum, who was benefitted by the writings of Monro, Camper, Kætseuter and others. Here also are added, tables containing the system of fishes by Ray, Dale, Schaeffir, Linnæus, Gowan, Scopola, Klein, and Gronovius.

The third volume, published 1792, completes the collection of Artedi's works. It contains technical definitions. After the generic and individual characters, come the names and Latin phrases of Artedi,—the synonymes of the best naturalists,—the vulgar names in English, German, Swedish, Russian, Danish, Norwegian, Dutch, and Samoyed—the season and the countries where every kind is found, their varieties, their description, and observations. The modern discoveries, even to our own times, are added. so that in this part is collected, the observations of Gronovius, Brunich, Pennant, Forster, Klein, Bloch, Gmelin, Hasslequist, Broussonet, Leske, Buijs, Linnæus, and other great examiners of nature.

This work concludes with the new genera, created since the death of Artedi; yet those of Klein, Linnæus, Gronovius, Block, Forster, Gowan, Forskall, Brunniich, Seopole, Hermann, and Houtuyn.

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THE BEE,  
OR  
LITERARY WEEKLY INTELLIGENCER,  
FOR  
WEDNESDAY, SEPTEMBER 26 1792.

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ESSAY ON THE INFLUENCE OF TASTE ON DOMESTIC AND SOCIAL LIFE, BY THE AUTHOR OF THE ESSAY ON TASTE IN ARCHITECTURE.

SIR, *To the Editor of the Bee.*

I HAVE endeavoured to show that taste is an artificial organ of perception, created in a healthy, temperate, uncorrupted individual, by the contemplation of nature. This discriminating power has received the name of that common sense which relishes and distinguishes, by the mouth and palate, the flavour of our nourishment, or of noxious food; because it may be considered as a spiritual palate, which apprehends and relishes the essential qualities of nature or art, separate from their grosser substance, leading us thereby to the preference of those things that are most conducive to the nourishment and growth of our immortal spirits. I have considered how this taste is conducive to the fitness, excellence, and beauty of our domestic dwellings, and of our public edifices, and am desirous to apply the same principles of argu-

ment, to the good government, and enjoyment of domestic and social life.

I shall consider this subject, *first*, as taste is productive of our own immediate tranquillity and happiness: *secondly*, as tending to the tranquillity and happiness of our families: and *lastly*, as promoting the tranquillity and happiness of the community with which we are connected, and ultimately that of the public at large.

*First*, As to our own immediate tranquillity and happiness. Who is there that does not sometimes feel that there is a void, a chasm, a somewhat in the mind, that feels confused, disordered, and ruinous, yet seems as if it might be repaired?

The disturbance and languor that is occasioned by this frame of mind, is removed by active business; some engaging pursuit that causes not remorse; by innocent amusements of all kinds, in succession; and by bodily exercises in the field. When we are in health, we see clearly about us in a moral sense, are satisfied with ourselves, and pleased with our companions. When pursuing our present objects of desire with alacrity, we, at the same time, look back with self gratulation on the past, and look forward to the continuance of an agreeable and creditable employment,—we are in that complex, but well arranged state of body and mind, which approaches most nearly to perfect happiness.

Now that this state cannot be approached, without the intervention of taste, will, I hope, sufficiently appear from the following considerations.

1<sup>st</sup>, It seems evident that the everlasting author of nature has so formed this world, that man alone is capable of contemplating its beauty, its adaptation to the relative designs of infinite wisdom and goodness, and to the happiness of the creature, as well as to the glory of the Creator ; and since the stoutest infidel must acknowledge, that, so far as we can discover, nothing has been constituted without a purpose, or in vain, so it appears that man has been endowed with a rational soul, and with taste and discernment ; that having been invited by the maker and governor of the universe to visit this planet, he might be able to admire it, to discover its innumerable beauties, and feebly, yet discriminately, to adore the wisdom and goodness of the Creator.

2<sup>dly</sup>, It is no less evident, that in proportion to the exercise of man's intellectual and contemplative powers, and his abstinence from gross and sensual excesses, he becomes more useful, perfect, and happy ; because he thus exercises himself according to his own peculiar constitution of nature, and does not degrade himself, by falling into the inferior nature of other animals, which being regulated by a mechanical and unchangeable instinct, do not commit such excesses, nor are disturbed in their functions, by the same energies of fancy and imagination which cause the disorders of human life.

And, *lastly*, It being certain, that all permanent tranquillity and satisfaction in animated bodies, arise from their being in a state that is according to nature ; man's nature being indisputably contemplative,

he cannot attain or preserve inward tranquillity, without using continually this faculty by which he is characterised, and distinguished.

But the moment man begins to contemplate, he becomes a man of taste, and the more he indulges rational curiosity and contemplates, in whatever situation he is placed, the more perfect he becomes in all his functions \*.

In the lower classes of society I acknowledge that men, and still more women, are prevented from applying this contemplative power extensively; but it will nevertheless render them happier and more useful in the circle in which they move, and it will tend to produce improvements in their business, and economy.

The journeyman gardener, carpenter, or weaver, for example, who indulges this natural propensity, will avoid much of the gross and pernicious intemperance of the vulgar, by turning their powers to some useful improvement in their respective employments, or to healthful, ingenious, and innocent amusements. But I am more immediately engaged in this essay to show that taste is conducive to the

\* The ingenious author here gives a more extended meaning to the word *taste* than it usually bears. The profound mathematician reflects and discriminates with great accuracy, yet the proportion of lines and numbers are not usually accounted among the objects of taste. We ought therefore to consider the author as here meaning only to say that mental discrimination constitutes the basis of good taste; though that discrimination may also be exercised on objects that are not, in the common acceptation of the word, accounted objects of taste. In an essay of this nature it would embarrass the reader too much to call off his attention at every step to nice metaphysical distinctions; yet, to prevent evils, it is necessary to take some notice of them.

tranquillity and happiness of the mind, independent of external, moral, or political causes, and shall have occasion hereafter to show how it co-operates in domestic and social intercourse.

It is impossible that the mind should enjoy repose and inward satisfaction when it is perplexed and distracted by confused or distorted notions concerning the appearances of nature, or the moral government of the world by its divine governor, or of the civil government upon which we are to depend for security and comfort.

Curiosity, less or more in every situation, excites the exploration of these riddles ; and taste, if this curiosity is indulged, succeeds to discriminate, with various degrees of accuracy, a satisfactory result, which produces a pleasant flow of thought and reflection, that calls for gratification of a similar nature, in a more extensive range of experience.

Curiosity meets here with the love of variety, and whets the appetite for knowledge.

Mr Paley, archdeacon of Carlisle, in his little essay on human happiness, has placed it, *1st*, in the exercise of the social affections : *2dly*, in the exercise of the faculties either of body or mind, in the pursuit of some engaging end : *3dly*, upon the proper constitution of our habits : and, *lastly*, upon the enjoyment of health. On all these heads he has treated the subject very pertinently, but has been forced to diffuse his argument, chiefly upon the proper constitution of the habits, which can be done no otherwise than by that power of discrimination, which produces the permanent quality to which we

affix the denomination of taste. Now though it must be confessed, that a great proportion of mankind are excluded by their daily and hourly toils, from launching out into extraneous employment, yet as every one has some leisure allotted, or permitted to them, and at least one complete day in the week, of relaxation from labour or business, it seems to be of unspeakable importance that this precious leisure should be employed in a way conducive, not only to the advancement of personal happiness, but to the progressive improvement in the individual, and of the general good of society, to which nothing can so much contribute as that quality which I have endeavoured to describe, and which in its due modifications, is nowise inconsistent with the humblest situations.

In the morning of life, when every thing is fresh, and new, and gay, it is easy to preserve the tenor of our minds, by the variety of agreeable and engaging pursuits which present themselves continually, and without trouble or research. But as life advances, the charm dissolves, the prospect of future happiness diminishes, the horizon shuts in, and closes all around us, the clouds sit deep with foreboding darkness. Then the inborn and inexpugnable desire of pleasure impels us to seek for that sweet variety and gentle agitation, in artificial pleasures and amusements, which we cannot find in the hackneyed routine of our ordinary occupation.

The man who has not taste, becomes in this sad dilemma, either a cynic, or a sensualist, a busy-body, a hot partizan, or an enthusiast in religion.

'The woman a gad-about, a card player, or a devotee. This is the moment that the insidious priest, the distorter of the wise and benevolent, the social and humane doctrines of Christianity, takes to instil the subtle poison of enthusiasm into his deluded votaries, and to teach them to look for happiness in the clouds, in opposition to the luminous and sublime, as well as rational doctrine of the founder, that the kingdom of heaven and happiness is within us. The fortunate votary of taste, seeks for rational pleasure in the devout contemplation of the works of nature, and the useful examination of the works of art, and the improving observation of the infinite variety of moral character, in history, biography, or in common life. He desires not to overleap the boundaries of our limited nature, the *flamantia mœnia mundi*, to plunge into the regions of fanatic enthusiasm, or the iron handed bigotry and intolerance, where the object is hid in the clouds, or evaporates in dreams ; but with a reasonable dependance on superintending providence, exercising all his rational powers, he investigates the noble and varied spectacle of natural beauty, which is presented to him as it were on a theatre, by its bountiful author, he enjoys the play, nor cares if he shall leave it before the beginning of the farce !

" Then hither bring the fair ingenuous mind,  
" By her auspicious aid refin'd,  
" Lo ! not a hedgerow hawthorn blows,  
" Or humble hare bell paints the plain ;  
" Or valley winds, or fountain flows,  
" Or purple heath is ting'd in vain.  
" For such the rivers dash their foamy tides,  
" The mountain swells, the dale subsides ;

" Even thrifless furze his wandering steps detain,

" And the rough barren rock grows pregnant with delight.

SHENSTONE.

I am, Sir, your humble servant,

B. A.

## GRAMMATICAL DISQUISITIONS.

*Continued from vol. x. p. 318.*

*Observations on personal pronouns.*

THE following essay is intended to give a general view of the essential properties and possible variations of the personal pronouns, upon principles that are not derived from the practice of any particular language, with a few remarks on some words in the English language, that have been usually ranked as pronouns.

A PRONOUN is a word that may be occasionally substituted in the place of a noun, and performs in language the same functions with the noun itself.

When the subject is examined, we are easily led to perceive that all nouns which can admit of a substitute for them, must be in one or other of the three following states, *viz.*

*1st*, The pronoun may be employed as a substitute for the party who speaks, or the party who addresses a discourse to another. The pronouns which perform this office have been, in general, denominated pronouns of the *first person*; or,

*2d*, It may represent the party addressed; and in this predicament it assumes the name of the pronoun of the *second person*; or,

*3d*, It may represent objects at a distance, or not present, to which the discourse refers; and, in this

case, it has been called the pronoun of the *third* person.

As these circumstances must occur in all languages, so we find these different classes of pronouns in every language; and it is these classes of words which have been denominated, in general, *personal pronouns*.

But though all languages agree in having these three classes of pronouns, they differ infinitely as to the variations they admit of, and other circumstances affecting them.

The pronouns of the *first* and *second* persons are affected by circumstances so much in the same way, that we shall find it convenient to consider them together, and the pronouns of the *third* person, which differ from them in several respects, by itself.

As *nouns*, in most of the languages we have been accustomed to study grammatically, admit of a three-fold variation, in respect to **GENDER**, **NUMBER**, and **CASE**\*, we have naturally been disposed to consider the *pronouns* which become their substitutes, as being capable of the same variations. But here the general analogy fails us. In the languages usually taught grammatically, we find no variation in the pronouns of the *first* or *second* person respecting *gender*; and, therefore, it has been concluded, *generally*, that these two classes of pronouns cannot with propriety admit of any variation in respect to gender. Our grammarians have even gone so far as to invent a reason why this rule should not be transgressed. Without being influenced by these reasons, which I

\* See Bee, vol. x. p. 241 *et seq.*

view as an attempt to shut the door against investigation, I shall here only briefly remark, that we can easily perceive that a variation in this respect is not contrary to nature; but we can even conceive that such a variation might, if it had been practised, be the source of much elegance and refinement in language; and, therefore, we may conclude, that it is not at all impossible, but some languages may be met with which admit of this particular variation.

As I find, however, that in the course of this investigation I shall frequently have occasion to point out deficiencies, and inelegancies, which are not in general adverted to, I shall beg leave to take notice here, once for all, of the great facility with which we accustom ourselves to make use of the same word in two or more distinct senses, where we experience a deficiency of terms, without being sensible of the smallest imperfection in that respect. For example, when I say, "it pained *her* to be compelled to sell *her* house," we are not sensible of the smallest impropriety or inelegance of language; though, had we occasion to employ the masculine instead of the feminine gender of the same pronoun, we could not say, "it pained *him* to be compelled to sell *him* house;" but we would find it necessary to say, "it pained *him* to be compelled to sell *his* house." This example brings us at once to perceive, what we did not before suspect, that the single word *her* is forced to perform, alike, the office of the two words *him*, and *his*, with neither of which we think we could possibly dispense. Were we to proceed by the same mode of analysis, we should be able to point out a variety of great

deficiencies which are never perceived in practice, though they would be immediately recognised had we been in the practice of a more perfect use of language. Where I take notice of possible variations that may take place in other languages, that do not take place among those we know, let me, therefore, not be accused of fanciful refinement, on the ground that we do not perceive the want of them. It would astonish any person who were to consider how many of the most essential parts of language might, by this mode of arguing, be annihilated.

### *Gender.*

THOUGH no European language therefore admits of more than *three GENDERS*, for their pronouns of the *first* and *second* persons, and few of them even of more than *one*; yet there is no impossibility but other languages may exist which admit of some, or all of the variations that follow\*.

*1st*, For the *masculine* gender, where the sex of the animal is known to be male.

*2d*, For the *feminine*, where it is known to be female.

*3d*, For the *indefinite*, where the sex of the parties is either not known, or immaterial, and therefore not necessary to be known, or where it is wished to be concealed.

*4th*, In countries where eunuchism prevails, and where of course this gender of animals must frequently occur, a variation might also be admitted for

\* The reader will observe that I take no notice of those accidental distinctions of genders, which have been produced by the particular termination of words, &c.; but refer only to the natural distinction of sex, &c.

them, which might be called the *imperfect*. We can easily conceive that prodigious force might occasionally be given to the language of contempt by the use of this pronoun.

5th, For the *neuter* gender, where inanimate objects are concerned. Some may, perhaps, think it would be a very unnecessary, and even an absurd refinement, to have a variation of these personal pronouns for the *neuter* gender; because inanimate objects neither can speak themselves, nor be spoken to. Yet it is very possible to form an idea of the utility of such a class of words, had they been in use in language. Even at present, when it is meant to denote a high degree of contempt for any person, the *neuter* English pronoun, of the third person, is often substituted for either of the other two genders in use in our language: thus, “*it*, meaning *he* or *she*, is a despicable creature,” “*it*, meaning as before, is a pitiful *thing*,” *i. e.* *person*; and it is surely as necessary to give nerve to the language of contempt, when the object is present, as when absent: and, as the speaker may sometimes wish to express a particular sense of humiliation or debasement of mind, denoting contrition, it is easy to conceive occasions when this gender might be adopted with great force and propriety, in the pronouns of the *first* and *second*, as well as of the *third* person.

Even in another way might this gender become necessary. Addresses to inanimate objects are common, even without any attempt at personification; as in the song, “*Cogie gin ye were ay fu’\**,” &c. in which cases the neuter pronoun might be employed

\* A humorous Scots ballad in which a person is represented as address-

with singular propriety. In short, there seems to be no doubt that the neuter gender might be admitted with regard to the pronouns of the *first* and *second* persons. Hence we may conclude that, instead of THREE, there might be *at least* FIVE genders of this class of pronouns.

*Of number.*

IN all languages each of the personal pronouns admits of a change respecting NUMBER, which must be at least *two-fold*, viz. *singular* and *plural*. Most languages have no other distinction in this respect; but some divide the plural into *definite* and *indefinite*. The Greeks, we have already said, admitted a *definite* plural for the *number two*, which has been called the *dual* number; the same distinction I am told also takes place in the *Gælic, Galic, or Celtic language*. But I have not heard that the *definite* plural has ever been extended farther than *two* in any language. It is plain, however, it might be with equal propriety extended to the number *three*, or other higher numbers; and it is by no means impossible but some languages may have extended this *definite* plural to other higher numbers, especially with respect to the pronouns. Should this be the case, and were a writer at all times permitted either to employ the *definite*, or the *indefinite* plural, as best suited his purpose, it might doubtless be a new source of elegance and perspicuity. sing *himself* to his *ergie*, that is, a dish that contains his victuals, in a very pleasing manner. The burden of the song is:

“ Cogic gin [if] ye were ay [always] fu’ [full,]  
Coge gin ye were ay fu’,  
I would sit and sing to you,  
I would sit and sing to you,  
Until that I was weary.”

## Of cases.

IN some languages certain relations that subsist between nouns or pronouns and other words, are denoted by a variation in the form of the noun or pronoun, to which class of variations has been appropriated the name of *cases*. In many languages no such variation subsists with regard to nouns, as particularly the English; and in all the languages where *CASES* have been adopted, the number of *cases* is so few as to perform very imperfectly the uses for which they seem to have been adopted; the highest number of cases in any European language being six\*, whereas the relations that for want of these come to be denoted by *prepositions*, amount to six times that number at least. This variation, therefore, seems to be, for the most part, a very unessential peculiarity of certain languages.

There seems, however, to exist in nature an essential reason for *one* variation, at least, in regard to case; and in respect to this particular circumstance all languages, that I know, admit a variation in their *pronouns*, even where the *nouns* do not. The object denoted by the noun or *pronoun*, when considered as connected with an active verb, may be viewed either as *active* or as *passive*; as the object from which the energy proceeds, or as that on which it acts. This distinction is real, and must subsist in all languages; though, from some unaccountable oversight, most languages admit of no distinction for the noun when placed in these different circumstances, though in

\* And even these are so imperfectly discriminated, that the distinction is in many nouns more nominal than real.

others it has been adopted; and the words then have obtained the name of the *nominative* and *accusative* CASES. Though perhaps it would be better to call them the *active* and the *passive* states. Our English *pronouns* admit of this distinction, though our *nouns* do not. The same may be said of many other languages, ancient as well as modern, even where grammarians do usually arrange the whole into cases; or in the Latin, for example, where more cases are adopted than in any other language, the *nominative* and *accusative* are the same in perhaps half the nouns of that language. This defect is the more to be regretted, in that no word has ever been adopted, which, when joined to the noun, denoted this relation, as in other cases.

*Another unobserved possible variation of the pronoun.*

THESE are all the variations that grammarians have admitted to be possible respecting the pronouns; because these are all the variations that have been carried into practice in the languages we have been taught grammatically. But there are several other relations that may subsist between the parties, for which pronouns become the substitutes, which it would be of great importance to be able to represent without circumlocution, with clearness and perspicuity, by means of a particular variation of the pronoun for that purpose. For example, the speaker may be supposed to address a discourse to the party present, or to speak of those who are absent, or to represent himself, under one or other of the following points of view, at least.

- i. They may be considered as inferiors.
- ii. As equals.
- iii. As superiors indefinite.
- iv. As superiors definite.

The number of variations, definite, would vary greatly according to the degrees of rank established in the country where the language was spoken ; but they could in no case, perhaps, be less than two, *viz.*

- 1st*, As respecting the king or first magistrate.
- 2d*, As respecting the supreme Being.

In all these respects, at least, we can easily conceive that a variation of the pronoun is not only possible, but in some measure absolutely necessary, before man can express, with any degree of precision, the sensations by which his mind is on innumerable occasions influenced. So necessary indeed is this variation of the pronoun, that although it has been hitherto, in as far as I know, entirely overlooked by grammarians, yet in actual practice, men, feeling the want, have, in most languages, adopted certain contrivances for removing the defect, which have been in some languages, more happily effected than in others.

In the English language we have no other pronoun of the *first* and *second* persons, but the words *I* and *thou*. Practice has enabled us however to vary these words from the original meaning ; and on some occasions to substitute others in their stead that are sufficiently absurd ; or periphrastic phrases are made use of to supply the place of a simple pronoun. Thus the proper pronoun *thou*, is, by general practice, now in a great measure appropriated to solemn

addresses to the deity, or as announcing commands; and in common conversation between man and man, the plural *you* is made to stand in place of a singular.

On the other hand, with a view to give a certain elevation of tone to majesty, in many languages the king, in the singular number, makes use of the plural pronouns, and says, in English, *we*, instead of simple *I*. On some occasions, rejecting the plural, the king uses the simple pronoun singular, with the addition of his distinctive epithet, as in Spain, *yo el re*, *I the king*.

Formerly we had in English an indefinite pronoun, expressive of general respect from an inferior to a superior, which has now fallen into disuse. The phrase was, *your honour*. But though this indefinite respectful pronoun be now obsolete, we still retain many other pronouns, *definite*, of the same class, as *your lordship*, *your grace*, *your excellency*, *your royal highness*, *your holiness*, *your serene highness*, *your majesty*, &c. And the word *friend*, as denoting kindness from a superior to an inferior, is still in use, though we have no pronoun that can become its substitute expressive of the same idea.

In the Spanish language they have proceeded a step farther than we have done in this respect. It is only in speaking to inferiors they make use of the plain pronoun *vos* or *os*. In addressing equals whom they wish to treat with respect, they make use of the word *usted*; and the periphrastic phrase, *vuestra*

merced\*. The general use of these phrases, gives to that language a dignity and politeness in colloquy, that scarce admits of being rendered into English with propriety.

The Germans also make use of the simple pronoun *euer*, *der eure*, or *der eurige*, to inferiors only. But superiors they address in the more respectful terms *ibr*, *dero*, *ibro* and *ibrige*.

In Swedish also they only make use of the word *ee*, when speaking to inferiors, *ban*, when addressing equals, and *her*, adding the name of the person, which is equivalent to Mr, with the proper name in English, when they address superiors.

It thus appears that this distinction of the personal pronouns, though it has been overlooked by grammarians, is natural and proper. I therefore conclude, that the personal pronouns, besides those variations already specified, of *gender*, *number*, and *case*, admit of another variation, denoting personal relation also. I do not find a name for this division at present sufficiently expressive.

All the variations above described, apply to the pronoun of the *third* person, in the same manner as to those of the *first* and *second* persons. But there are other peculiarities respecting the pronoun of the *third* person, that do not apply to the others, which require now to be noticed.

*To be continued.*

\* I think I can perceive a peculiar delicacy in the derivation of this phrase. *Merced*, by itself, is a favour or a gift. The oblique reference to favours conferred, when speaking to those who, from superiority of rank, have the power of conferring these, seems to be particularly delicate. Perhaps this is only a refinement.

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SIR, *To the Editor of the Bee.*

IF the partiality of a brother does not mislead my judgement, I should hope you will not think the letters I inclose undeserving a place in your miscellany. They are the artless effusions of a favourite sister, in whom my soul delighted, who is now, alas!, no more! Every thing that belonged to her was justly dear to me; and I would not wish that a single word that ever escaped her lips, or came from her pen, should be forgotten. I cannot suppose that you will be equally partial as myself; but I own I should be much disappointed were you not interested in them. The dear innocent was scarcely sixteen when she wrote them; I have not dared to alter a single syllable of them myself, but I leave you to correct any little grammatical slip you may perceive. The names only are disguised, and the places and dates suppressed, to prevent a too easy discovery of the persons. I am your constant reader and sincere well-wisher,

ALBERT.

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FROM ISABELLA TO ALBERT, LETTER FIRST.

*My dear brother,*

I HAVE been here a whole week without writing to you, though I can assure you I have waited with the utmost impatience till the time of your return; for since I have been at perfect liberty, I long very much to communicate my thoughts to you with that unrestrained freedom we used to do at home; for as to letters from the boarding school, you know they must all

be read by the mistress, so that we can say nothing but that we are very well,—like the school exceedingly,—are vastly happy in our situation, and so on; now, as I disliked my situation very much, you may believe I avoided writing from thence as much as possible, so that I contented myself with writing to my mother *in the common style*, without thinking of addressing a single line to you.

Now that I can write with freedom, I take the first opportunity of expressing my unhappiness at ever having been sent to that boarding school. It is a sad place indeed. Not that I do not think very well of our mistress,—I believe she is a very good woman; but having so many young misses to superintend, it is impossible she can look after them in the way I could wish, or as I have been accustomed to at home. All she can do is to watch over their behaviour when under her own eye, and take care of their external conduct; with regard to which points she is extremely vigilant indeed. But what is the consequence? The young misses learn a habit of disguise and dissimulation that is quite shocking to me. You know that the most serupulous adherence to truth has been ever inculcated to us, by our dear parents, as the basis of every virtue; and the smallest deviation from it has been ever represented to us as the certain inlet to every vice; so that disguise is, to me, the most shocking of all things: yet all at a boarding school is disguise. The surface must be polished, whatever be within; and you would be shocked to see that some girls who are the most forward to do bad things, and in private prompt others to do them, can put on a most

plausible appearance in public, and deceive even our mistress into an opinion that they are the very best in the school. I hate this conduct. They find that I will not concur in plans for cloaking their faults ; and I am cordially hated by them in my turn. Nor can you easily conceive how many mortifying rubs I met with on this account.

But I hasten from this disagreeable subject to one that will be much more interesting to you. The family with whom I am at present, and where I hope I shall remain as long as possible, is in every respect different from our nunnery. It consists of Mr and Mrs Drury, and two daughters ; the youngest about my own age, the other some years older ; the sweetest girls you ever saw in your life ; and so open ! so unaffected ! so kind ! that you would be quite delighted with them ! I cannot describe characters. You have often told me that young persons cannot discriminate traits of character ; I believe it. Yet I am so delighted with the whole of the family, that I cannot help endeavouring to describe them a little. I am sure if you saw them, you should find it impossible to avoid telling me what they are ; and I love them so much, and I love you so well, that I cannot help wishing you would love them too. Indeed, indeed, dear Albert ! you would love them more I believe than I can do, because you could appreciate their merit better if you knew them.

Mrs Drury is, I suppose, about forty years of age, and is of a pleasing disposition and unaffected manners ; she is calm and deliberate in her words and actions ; she is never in a flurry ; and she has the af-

fairs of her family so arranged, as that you would think they went on of themselves without any effort or trouble to any one. Her face is to me very interesting; because I think I perceive in it that kind benevolence, my mother used so feelingly to tell us she possessed, though she never could be accounted beautiful. What particularly charms me, is the unaffected kindness and attention she bestows upon her husband, who is the best of men. It was not at first that I perceived this; for you meet with no profusion of the common terms of endearment, as Sweet! Honey! Dear! and so on. My dear, uttered softly, and as if it were half by stealth, will sometimes escape her; but even that is seldom. She makes no fuss about him; no fracas about his health, or useless questions that tend to tease under the appearance of kindness. She contents herself with being silently observant of every thing that will tend to please or displease him. She is particularly attentive to his taste at table. This attention is not displayed in culling out, in an ostentatious manner, the nicest bits, and pressing them upon him; but in noticing what it is he eats most readily of, and what he lets alone, when left to his own free choice. By this habit of quiet attention, she knows perfectly what is suited to his taste, both as to the nature of the victuals, and the mode of dressing them; and you cannot easily conceive what pains she is at to have these articles suited to his wishes. In cooking, the English in general far excel us. Indeed I think a great part of our best things in Scotland are spoiled by being badly dressed. And how can it be otherwise? In ordinary families, where proper cooks can not be afforded, the

mistress leaves the whole business of the kitchen to an ordinary servant. Here, it is quite otherwise. In every family of moderate rank, the mistress is herself often in the kitchen to see that things are quite right. Mrs Drury is more than usually attentive to this department. Whenever she remarks that a particular kind of seasoning, or mode of dressing a dish, is relished by her husband, she sees it the next time done under her own eye; remarking, with the nicest distinction, all particulars, and taking care that the servant shall distinguish them as well as herself. Hence it happens that the victuals are, at this table, always dressed in the nicest manner that can be conceived; and there is not a single article of provisions ever brought into the family, that is not made to turn out to the greatest account.

But it is not in the article of the table, alone, that Mrs D. discovers her attachment to her husband. She is naturally attentive to her family, and economical of every thing; but particularly of time: she is never one moment unemployed, nor will suffer one of her children to be so; but as Mr D. is of a studious disposition, and takes no pleasure in relaxation, without the company of some person in whose conversation he is interested; and, as he takes great pleasure in walking, if she accompanies him, she takes care that he shall never perceive that she is in the least embarrassed about leaving her employment when he seems inclined to walk. I have seen her, when busied about a thing in which she was very much interested, throw it aside with the greatest cheerfulness whenever he appeared; so that you would think she had just been waiting on purpose

to accompany him. The good man then goes forth to walk with the utmost alacrity, in the garden or in the park, where he takes pleasure in pointing out every new improvement he thinks of: nor could he adopt a single plan without her approbation. There also she remarks the objects in which he takes pleasure; there is not a stalk of a flower, or a twig of a tree, in which she sees he takes an interest, that she does not watch over with a particular care; but she does even this without making any ostentatious parade of it to him. O what a delightful woman she is! —She takes care to warn the girls not to touch such or such a thing, and to prevent their companions from doing so. The good man sees these attentions, and is highly delighted with them. He is in his turn equally attentive to her; nor does he seem to have any enjoyment in which she does not bear a part. It is these mutual attentions, in matters that too often are thought not to merit attention, which endear this happy pair to each other in such a remarkable manner. I have often observed this my dear Albert. And when I think that these must some time or other be separated, I cannot help even now shedding a tear for the unhappy fate of the survivor. How hard is the lot of humanity, that even our highest enjoyments must be embittered with the recollection that they must some time have an end! Why did this thought obtrude itself at present? It quite overcomes me. I cannot proceed farther. Indeed I can think of nothing else. Forgive me at present dear Albert! I shall try to dissipate these dismal thoughts, and give you some farther particulars at another time. May you ever be happy! Adieu. ISABELLA.



ENGRAVED FOR THE BRAVE.



A View on the Island of Inch Colum.

## DESCRIPTION OF THE PLATE.

THE plate exhibits a view of the ruins of a monastery on a small island in the Frith of Forth, called Inch Colm, and a distant prospect of the city of Edinburgh, with the Pentland hills behind it.

This island was originally called **EVONIA** or **ÆMONA**. Under the first name it is described by Lesly bishop of Ross \*, and Buchanan distinguishes it by the last name †; both of which historians, with little variation, record the following transactions respecting it.

Alexander I. having been nearly wrecked, had the good fortune to get safe shelter upon this island, where he was forced to remain for three days that the storm continued. In memory of this event he built a temple here in honour of St Columba, from which the island derives its modern name, and endowed it with lands for the maintenance of canons. It is the ruins of this structure which are represented in the plate.

The building is now almost entirely unroofed, and in ruins. It has been of considerable extent, and, besides out-buildings, has consisted of a complete square, inclosing an inner court of no great extent. Most of the apartments have been vaulted. The church is an octagon of small dimensions, and tolerably entire at present.

The register of this abbey reports, that *Allan Mortimer*, laird of *Aberdour*, gave the half of his lands to

\* *De origine moribus & gestis Scot. Romæ*, 4to. 1578; p. 220.

† *Hist. Ultraj. 8vo. 1668* p. 217.

God, and the monks of this monastery, for a burial place in their church for himself and his family. But these monks, instead of fulfilling the testator's intention, by interring their benefactor in their church, are said to have thrown the corpse in a leaden coffin into the sea, as they were bringing it from Aberdour. The place where this infamous sacrilege was committed is called *Mortimer's deep* to this day. Some time after this adventure the lordship of *Aberdour*, about the year 1126, descended to the *Viponts* from the *Mortimers*, by marriage. After the destruction of monasteries, the island came to the *Stewart* family; and now, with the western half of the manor of *Aberdour*, belongs to the earl of *Murray*, descended from the well known regent of this kingdom.

The island itself is situated near the north side of the *Forth* opposite to *Aberdour*, scarcely two miles distant. It is of small extent, not exceeding, on the whole, half a mile in length from east to west; and the greatest width less than a quarter of a mile. It consists of two eminences, with a neck of low land between, where the island is nearly cut through by the sea. On this low neck the monastery is built. The soil seems to be abundantly fertile; but it is, at present, so overrun with rabbits, that no use can now be made of its produce.



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POETRY.

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TINDER AND FIRE.

A LITTLE STORY ADDRESSED TO YOUNG LADIES.

*For the Bee.*

Away! cries Cælia, warm and young,  
With all your pedants grave and dull,  
Whose modesty ties up their tongue,  
Who sit like owls with wisdom overfull;  
Who muse and nod in thought profound,  
With leaden eyes that love the ground;

And who, insensible to love,  
And deaf to beauty's ev'ry charm,  
Like walking statues coldly move  
About, and merely do no harm.

Ah no! 'tis manners brisk and gay,  
That fill the breast with warm desire;  
In short, give me the man whose clay  
Is animated with a little fire.

Bravo! cries Doctus, in his elbow chair,  
I like your spirit,—but take care;  
Tinder and fire, howe'er so cold the weather,  
Without a licence, ne'er should come together.

G. C.

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ON CHARITY.

*For the Bee.*

While some attune the love-sick lay,  
And soar where fancied pleasures dwell,  
With thee, Compassion! would I stray,  
Soft stealing to some lonely cell,  
In search of humble modest griet,  
And blushing when thou bring'st relief.

The female mind, divinely kind,  
Celestial beams when sorrows flow,  
The honest heart, devoid of art,  
Cannot resist the tale of woe;  
The kindred soul seeks comfort in the sky,  
Waisted, exulting, on a feeling sigh.

Want link'd to vice may pity claim,  
And ask an off'ring from thy hand,  
Thy tears express that still thy aim  
Is to relieve, not reprimand;  
A sister hir'd from virtue needs a tear,  
For guilt and poverty are hard to bear."

The new made orphan's artless tale,  
Pleads not with thee, blest friend! in vain;  
Thy sighs are blended with the gale,  
Thy healing balm relieves the pain;  
And Innocence, enraptur'd, will intrude  
Its May morn tears and smiles of gratitude.

Age, feeble, tottering to decay,  
A-kin to childhood, near the tomb,  
Awaken'd by thy fost'ring ray,  
Forgets the grave, the future's womb;  
And down the time-worn cheek of eighty years,  
The grandsire's thanks descend in joy-dimm'd tears.

O Charity, benign! still spare  
From thy rich store, with liberal hand,  
Comfort to ease the brow of care,  
And scatter plenty o'er our land;  
Give, for thou lend'st,—sow, for the gain is seven;  
Peace is the spring time, and the harvest heav'n!

MASCA.

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### GLEANINGS OF ANCIENT POETRY.

TO SLEEP, BY DRUMMOND OF HAWTHORNDEN, *anno 1616.*

SLEEP, Silence' child, sweet father of soft rest!  
Prince, whose approach peace to all mortals brings,  
Indiff'rent host to shepherds and to kings,  
Sole comforter of minds with grieve opprest.

Loe! by thy charming rod, all breathing things.  
Lie slumb'ring, with forgetfulness possest,  
And yet o'er me to spread thy drowsie wings;  
Thou spares, alas! who cannot be thy guest.

Since I am thine, O come! but with that face  
To inward light which thou art wont to show,  
With fained solace ease a true-felt woe;  
On if, deafe god! thou doe denie that grace,  
Come as thou wilt, and what thou wilt bequeath;  
I long to kisse the image of my death.

## ON THE CRINAN CANAL.

IT is now once more in agitation to have a canal cut across the isthmus of Cantire, from Crinan to loch Gilp, an undertaking of such obvious utility, that it has been often proposed, but always abandoned for want of funds to carry it into execution. Whether these funds will now be found I cannot pretend to say; but Mr Rennie, so well known for his skill in undertakings of this sort, has been this summer employed to survey this, and some other places upon the west coast of Scotland, by order of the society for improving the British fisheries, from whose enterprises it is to be hoped some good will result to the community.

That our readers may form some idea of the utility of this enterprise, let them be informed, in few words, that Cantire, (with Lorn,) is a peninsula of nearly eight miles in length, which separates loch Fine, at the head of which the town of Inverary stands, from the Western Ocean. This peninsula, in scarcely any place, exceeds twenty miles in breadth; but at one place in particular, Tarbat, it is so far indented, by two arms of the sea from the opposite sides, as to leave a neck of land of one mile only between them, and in another place, Crinan, the distance across is only five miles.

The navigation on the west coast of this peninsula is more hazardous than on any other part of the west coast of Scotland, as it is in general a flat shore without harbours; and the sea being boisterous round the Mull of Cantire it is particularly dangerous to open boats; and as all the little commerce of the Western Isles into the Clyde must at present be carried on in such boats, scarcely a year passes in which some of these boats are not wrecked, and the sailors drowned in this long and hazardous voyage.

Were a canal cut across this isthmus, the voyage to these markets would not only be shortened nearly one half, but an opportunity would also be given to allow the fishermen in loch Fine, to prosecute their fisheries on the western coasts, when opportunities offered, as well as in loch Fine itself, to which they are at present entirely confined ; and the fishermen on the west could in the same way have access to loch Fine, when the herrings cast up there, and not on their own coast ; for it often happens that they may be caught in myriads on the one side of the peninsula, when not one can be found on the other side of it.

The smallest size of a canal that is ever made, would serve for these purposes ; but were it made of a size sufficient to admit busses, and other decked vessels that usually navigate on that coast, the benefits arising from it would be augmented to a tenfold degree ; and the improvements this would occasion, cannot be at present, with any degree of accuracy, appreciated.

The general opinion at first was, that the canal could be easiest made at *Tarbat*, as there the neck of land was not only shorter, but the rise of ground between the two seas considerably less than at Crinan ; but upon a nearer investigation, it has appeared to every person of skill who has examined it, that the cut ought rather to be made at Crinan.

The chief objections to that at Tarbat, are these : the mouth of west loch Tarbat runs considerably to the southward, so as to require a wind for navigating in that loch, different from that which would be wanted by vessels in general which would pass that way.

The loch itself is shallow, full of rocks, and the navigation in it by no means as safe as could be wished.

The whole track of land in this course to be cut, consists of a solid rock of granite, which could not be cut

through without great difficulty, and at a considerable expence ; and lastly, there would be great difficulty in finding water to supply the waste by lockage ; nor does it appear probable that a quantity sufficient could, in any way, be obtained to supply that waste, should the intercourse ever become considerable.

On the other hand, though the cut at Crinan must be longer, and the rise upon the whole greater than at Tarbat, yet the conveniences that would result from it, were it once made, appear to be much more than sufficient to counterbalance these.

The entry into loch Crinan is wide, and would admit of vessels sailing out of it almost with any wind ; and vessels going southward or northward with a fair wind, would not suffer any retardment by being obliged to alter their course.

The bottom of the valley through which the cut must be carried is, for the most part, soft ground ; and the principal rock they would meet with in their course is lime stone, which would pay well for the digging of it ; and, lastly, it can command a supply of water, with scarcely any expence, that would be much more than sufficient for any navigation that could ever be expected to take place there. Indeed the convenience in this respect is such here, as to be almost unrivalled any where, and therefore deserves to be slightly specified.

On an eminence at one side of the valley there is at present a fresh water loch (lake) of great extent, which forms a natural reservoir, that supplies a perennial stream that at present flows through the valley. The outlet from this lake is a narrow pass, which, if closed up with a proper dam, leaving a sluice for the purposes wanted, the surface of this loch might be raised five or six feet higher than at present ; in which case it would find for

itself another opening to the Western Ocean, by which might be discharged all the superfluous water that should ever be accumulated there by land floods or otherwise, without incommoding the navigation in the smallest degree. Thus would there be obtained, without any expence, a perpetual and abundant supply of water, without ever being incommoded with one drop more than was wanted.

Several years ago, Mr Watt, the ingenious improver of the steam engine, was employed by the commissioners for managing the forfeited estates in Scotland, to survey both these passes, and to make an estimate of the expence of cutting a canal in each of them, from whose report the following particulars are extracted.

*Abstract of Mr Watt's report and estimates of the expence of making a canal of different depths across the peninsula of Cantire, at Tarbat and Crinan.*

	By the Tarbat passage.	By the Crinan passage.
The total distance between high water mark on each side the isthmus, — — —	1 mile	6½ miles
The greatest perpendicular rise above high water, neap tides, is, — — —	45 feet	75 feet
The expence of a canal of seven feet deep is estimated at, — — —	L 17 988 10 6	L 34 879 0 6
Ditto of a canal of ten feet deep at, — — —	23 884 7 0	48,405 5 7
Ditto of a thorough cut without locks, of twelve feet deep at high water, neap tides, at, — — —	73 843 9 5	
Ditto of ditto, fifteen feet deep, at, — — —	120,789 9 6	

### LOVE AND JOY. A TALE.

IN the happy period of the golden age, when all the celestial inhabitants descended to the earth, and conversed familiarly with mortals, among the most cherished of the heavenly powers were twins, the offspring of Jupiter, Love and Joy. Wherever they appeared, the flowers sprung up beneath their feet; the sun shone with a brighter ra-

dante; and all nature seemed embellished by their presence. They were inseparable companions, and their growing attachment was favoured by Jupiter, who had decreed, that a lasting union should be solemnized between them, so soon as they were arrived at maturer years. But in the mean time, the sons of men deviated from their native innocence; vice and ruin overran the earth with giant strides; and Astrea, with her train of celestial visitors, forsook their polluted abodes. Love alone remained, having been stolen away by Hope, who was his nurse, and conveyed by her to the forests of Arcadia, where he was brought up among the shepherds. But Jupiter assigned him a different partner, and commanded him to espouse Sorrow, the daughter of Até. He complied with reluctance; for her features were harsh and disagreeable, her eyes sunk; her forehead contracted into perpetual wrinkles; and her temples were covered with a wreath of cypress and wormwood. From this union sprang a virgin, in whom might be traced a strong resemblance to both her parents; but the sullen and unamiable features of her mother were so mixed and blended with the sweetness of her father, that her countenance, though mournful, was highly pleasing. The maids and shepherds of the neighbouring plains gathered round, and called her, Pity. A red-breast was observed to build in the cabin where she was born; and while she was yet an infant, a dove, pursued by a hawk, flew into her bosom. This nymph had a dejected appearance,—but so soft and gentle a mien, that she was beloved to a degree of enthusiasm. Her voice was low and plaintive, but inexpressibly sweet; and she loved to lie for hours together on the banks of some wild and melancholy stream, singing to her lute. She taught men to weep; for she took a strange delight in tears; and

often, when the virgins of the hamlet were assembled at their evening sports, she would steal in amongst them, and captivate their hearts by her tales, full of a charming sadness. She wore on her head a garland, composed of her father's myrtles, twisted with her mother's cypress.

One day, as she sat musing by the waters of Helicon, her tears by chance fell into the fountain; and ever since, the muses' spring has retained a strong taste of the infusion. Pity was commanded by Jupiter to follow the steps of her mother, through the world, dropping balm into the wounds she had made, and binding up the hearts she had broken. She follows with her hair loose, her bosom bare and throbbing, her garments torn by the briars, and her feet bleeding with the roughness of the path. The nymph is mortal, for her mother is so; and when she has fulfilled her destined course upon the earth, they shall both expire together, and Love be again united to Joy, his immortal and long betrothed bride.

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#### NEW INVENTED IMPROVEMENTS ON MACHINERY.

##### *Unwoven cloth.*

EFFORTS have been made for some time past, to weave by machinery. A gentleman, we have been informed, has lately obtained a patent for making cloth *without weaving*. By the account we have received, this cloth is made in imitation of felt, and therefore it can be made only of animal matters. By this mode of management, it is easy to conceive that stuffs of great beauty may be made at a small expence, by covering the surface with a small quantity of the finest kinds of furs; but how such cloths will last, time only can discover.

*Weaving machine.*

MANY persons have at different times invented machines for weaving a complete shirt, or coat, without a seam; these, however, have hitherto been all laid aside in practice, as matters of mere useless ingenuity. It is probable the same thing may happen with regard to an invention that has been lately announced in the newspapers, said to have been made by an artist near Halifax, with which he can weave a complete suit of clothes of any fashion required, each article consisting of one piece only, without a seam.

*New improvement on the spinning machine.*

An important improvement we hear has lately been made in the spinning of cotton, by a gentleman who has the superintendance of one of Mr Dale's most extensive works in Lanarkshire. Hitherto it has been found to be impracticable to spin cotton yarn for the chain, or warp, by machinery turned by water: it was necessary to do it by hand, on the machines called *jennies* or *mules*. On these last machines the operator drew out the thread with unequal degrees of quickness, twisting it more at one part of the operation than another, which inequality, in the two branches of the operation, they did not know how to perform entirely by the machinery without hand. The gentleman of whom I speak, has contrived an apparatus by which he is able to effect this operation by machinery, alone, in a manner, it is said, much better than it can be done by the hand. He has, we hear, taken out a patent to secure his invention; and report goes, that he has been already offered fifty thousand pounds by certain manufacturers in Manchester to assign his patent to them.

This was an improvement so much wanted, and at the same time so obviously within the power of machinery to perform, that it is rather a surprise it should have been so

long from being hit upon, than that it should now be discovered.

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## AGRICULTURE.

## COMPARATIVE TRIAL OF DIFFERENT KINDS OF OATS.

In a former number of this work some observations were thrown out, tending to show the great benefits that would accrue from an exact knowledge of the distinguishing qualities of the different varieties of each of the kinds of grain that are cultivated in Europe. The following experiment made by Mr Crette de Palluel, a noted cultivator at Dugny in France, tends to confirm these remarks..

“ I sowed,” says he, “ several kinds of oats, *viz.* from Artois, grain of a very fine quality ; of Champaigne, the grain smaller and blacker ; of Normandy, a grain white as barley ; and the native corn of this country.

## Result.

“ That of Normandy, though having a hard and thick husk, run into ear, and ripened ten days before the others ; that of Champaigne was five days later ; the corn of Artois, and that of this country were still five days later.

“ The Normandy and Champaigne oats produce most straw ; but they are very easily shaken.”

This is rather an uncommon circumstance in this country ; for I think most of the oats that are early and very easily shaken with us, are not nearly so productive of straw as some other sorts.

“ I think, however,” adds he, “ that the white oat of Normandy might be cultivated with advantage in this country, because of its coming soon to maturity, which would enable the farmer to reap it before his wheat ; and also because it weighs more than twenty pound the setier, more than the same measure of our own kind of oats.”

It is to be regretted that Mr Palluel has not specified the proportional produce of each on the same space of ground.

It is farther to be regretted that our countrymen should be so shy at making comparative experiments of this sort. The benefits that would be derived from these would be great.

#### EXPERIMENTS ON GYPSUM AS A MANURE.

When gypsum was noticed in this work as a manure, Bee, vol. i. p. 297, it was hinted that probably its effects might be different in America from what we experienced in Europe, chiefly because the grasses which naturally spring up there, are probably different from those that are commonly cultivated here. It even appeared from these experiments, that this manure operated more powerfully on one kind of vegetable production than another; the effects on grass, were great, on wheat, scarcely perceptible.

The following experiments tend to show, not only that it operates differently on different vegetables, but also its comparative effects when tried with some other manures. The experiments were made by the same Mr Crette de Palluel; and both the former and this are recorded in the memoirs of the Royal Society of Agriculture in Paris.

#### *Experiment first.*

“ I divided a piece of lucerne,” says he, “ consisting of four arpents, into four equal parts. The soil was all of equal quality.

“ On the first division I caused be sowed thirty bushels of peat ashes, which cost five livres.

“ On the second thirty bushels of gypsum, which cost five livres ten sols.

“ On the third, thirty bushels of pigeons dung, value six livres.

“ And on the fourth, nothing.

## Result.

“ When compared with the last division, the first produced fifteen bunches of lucerne more ; the second afforded only twelve of excess ; the third produced thirty bunches more than the last.”

## Experiment second.

“ The same quantities of each manure were laid on a moist meadow, of four arpents, divided equally in the same manner.

“ The peat ashes produced nearly the same effect as above ; the gypsum made a great difference in the crop ; the grass pushed out much stronger, and was of a better quality, and it yielded twenty-two bunches more than that which had nothing.

“ Pigeons dung has long been known to improve moist meadows very much, by extirpating bad kinds of grasses, bringing white clover in its stead, and augmenting the crop. It produced one fourth more.”

These experiments still are less accurate than could be wished ; yet it clearly appears that gypsum, as a manure, in this instance, operated more powerfully than peat ashes, on moist meadow ground, though less so on lucerne. It is seldom we can get all that we desire, but when we advance a step, our labour has not been in vain.

## SHEEP FED ON THE LEAVES OF TREES.

Without a rigid economy, agriculture can never be carried to its highest pitch of perfection ; and for the want of it much waste is sustained, and great losses incurred in many parts of Britain. In other countries they are often obliged to have recourse to expedients for supporting their live stock which we would despise ; but which we might often imitate with great profit. The following affords a lesson of this sort :

“ In the month of June,” says Mr Crette de Palluel, “ foreseeing a scarcity of forage, and desirous of finding a food for my sheep without consuming my vetches, I fell upon

an expedient that succeeded with me perfectly well. I sent a person every day to prune twenty elm trees, and leave the branches scattered in the way where my sheep were to pass. These sheep, to the number of 550 made an abundant repast on the leaves, and then the branches were bound up into fagots. My sheep had no other nourishment till the harvest was got in. The elms have suffered nothing ; as I took care they should be properly pruned. I also, in the months of September and October, pruned my willows and poplars, all the branches of which I preserved in a dry state ; and this food was of great use to me during the winter for my sheep. I can affirm that those which were not intended for the butcher, lived upon nothing else but these branches.

“ I also fattened 300 sheep with potatoes and cabbages, for which I got a very good price.”

I have long ago remarked, that sheep can be easily and well sustained during a storm of snow in winter, upon branches of fir trees, thus cut down daily, and given to them. Firs can be reared almost on every sheep farm, without difficulty ; and if plantations for this purpose were duly made, and carefully thus applied, many thousand head of sheep might be annually saved, that at present inevitably perish. Yet I never heard of a plantation that had been made for that purpose ; and very few that had ever been applied in that way at any time. The sheep that are thus lost may be said to be sacrificed by ignorance on the altar of pride.

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#### A HINT FOR THE BEE.

CHILDREN are fond of listening to stories. Might not those who are about them, while curiosity is all awake, and the memory retentive, avail themselves of this circumstance, to introduce the most interesting parts and passages of real history, instead of ghosts and hobgoblins ?

True it is few are able to do it in a proper manner, *viva voce*; but the attempt properly made, might improve both the speaker and the audience.

MICA.

## TO CORRESPONDENTS.

THE very polite remarks of *Joseph Scaliger*, though the arguments owe their origin chiefly to misunderstanding the opinions he combats, than any thing else, and are not therefore convincing, should have had a place as soon as possible, except for the same reason that induced the Editor to postpone the paper to which they allude, for more than an year and an half, *viz.* the fear that the subject could prove but very little interesting to a great majority of his readers. It is unfortunate that that paper should have been so inaccurately written as to give rise to these mistakes; and the writer of it would no doubt wish to explain farther, which would augment the evil, by disgusting his readers; so that it is more adviseable for the Editor to leave things as they are. Indeed the matter is, in itself, of so little consequence, that readers may judge of it as they please, without any material detriment to the cause of literature: and so much was the Editor convinced of this, that, had it not been judged necessary to pave the way for another, which he thinks of greater importance, it would not have been admitted at all. The Editor's best thanks are due for the very obliging terms in which this writer has expressed himself. It shall be carefully preserved.

The slight notices concerning Sir William Bruce, &c. are thankfully received; farther particulars are requested.

The elegant and interesting statistical communications respecting America are thankfully received; together with the friendly hints that accompanied them, of which the Editor hopes to avail himself.

The singular letter of C. Skene is a great literary curiosity, and shall appear with the very first opportunity.

The Editor has been favoured with an interesting communication from the ingenious Miss Rhodes, respecting the rearing of silk-worms in Britain, which shall appear in our next

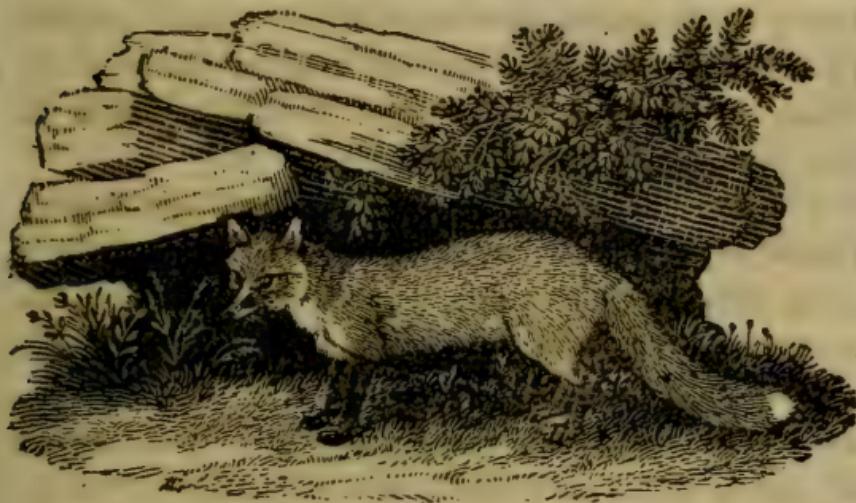
*Philologus* is respectfully informed that there are hundreds of valuable pieces in the possession of the Editor, of a much older date than the communication referred to, which he has not found it possible to overtake; though, from particular circumstances, others of a later date must have been occasionally inserted. With the utmost desire to oblige all his correspondents, and at the same time not to disappoint his other readers, he must be allowed to adopt the conduct that seems the best calculated to fulfil both these objects at once. He fears his desire for avoiding the imputation of partiality, sometimes leads him farther than it ought to do.

It is with regret that the Editor declines the task that *Merina* requests of him, as he considers himself to be by no means qualified to perform it in a proper manner.

The biographical memoir by *R. W.* is received, and shall appear with the first convenience. Articles of this sort are very acceptable.

*W. W.* says that the *MOURNING MOTHER*, inserted in p. 65th of this volume, has been by mistake, ascribed to him, and desires that this public notice of it may be given.

THE BEE,  
 OR  
 LITERARY WEEKLY INTELLIGENCER,  
 FOR  
 WEDNESDAY, OCTOBER 3. 1792.



THE CUR FOX.

MANY persons have heard of the fox who never saw one; many a lady has had her hen roost robbed by this crafty enemy, who never had the satisfaction of knowing what sort of a creature he was. The representation of that animal above given, being very exact, may serve to satisfy that curiosity. In size, it is nearly the same with that of an ordinary

cur dog. Its colour, a russet brown ; the hair never lies sleek to the skin. Its eyes are remarkably lively and brilliant, and very significant and expressive. Its tail is long and bushy, which it seems greatly to admire, and frequently amuses itself by endeavouring to catch it as it runs round. In cold weather, when it lies down, it folds it about its head.

There are several varieties of foxes in Britain ; but that above described is the most common, and approaches nearest the habitations of mankind. It lurks about the out-houses of the farmer, and carries off all the poultry within its reach. It is remarkably playful and familiar when tamed ; but, like many wild animals half reclaimed, will, on the least offence, bite those it is most familiar with ; and it is always of a thievish disposition.

The fox sleeps much during the day ; but during the night it is active in search of its prey, which it often obtains by surprising artifices ; on which account the cunning of the fox has become proverbial ; and numberless instances of it are related in all countries. He will eat flesh of any kind, but prefers that of hares, rabbits, poultry, and all kinds of birds. Those that live near the sea coasts will, for want of other food, eat crabs, shrimps, muscles, and other shell fish. They are also fond of grapes, and do great damage in vineyards to which they can have access.

They are so greedy of honey as boldly to attack the wild bees for it ; and frequently rob them of their stores, though much incommoded by the stinging of the bees.

The fox sleeps sound ; and, like the dog, lies in a round form. When he is only reposing himself, he stretches out his hind legs, and lies upon his belly. In this position he spies the birds as they alight on the hedges or places near him, and is ready to spring upon such as are within his reach. He rarely lies exposed ; but chooses the cover of some brake, where he is pretty secure from being surprised. Crows, magpies, and other birds, which consider the fox as a common enemy, will often give notice of his retreat, by the most clamourous notes ; and frequently follow him a considerable way, from tree to tree, repeating their outcries.

Foxes produce but once a year, from three to six young ones at a time. When the female is pregnant, she retires, and seldom goes out of her hole. She comes in season in winter ; and young foxes are found in the month of April. If she perceive that her habitation is discovered, she carries them off, one by one, to a more secure retreat. The young are brought forth blind, like puppies. They grow eighteen months, or two years, and live thirteen years.

There is so little difference between the dog and fox, that it is difficult to characterise them distinctly from each other. Yet the dog discovers a great antipathy to the fox, and pursues him with surprising keenness. Experiments have proved, however, that the fox and dog may be brought to breed together ; though not without difficulty. Whether the progeny can again produce, or if they be infertile, like mules, seems not to have been yet fully ascertained.

Hunting the fox is one of the most favourite rural diversions among people of high rank in England. For that purpose, many privileged covers are kept in different parts of the country, where foxes are suffered to breed without annoyance, to the great prejudice of the farmers around. Were it not for this circumstance, foxes, as well as wolves, would probably have been long ago extirpated in England.

They shelter themselves, and breed in holes in the earth, or among rocks, where they can find them; but not being capable of digging, themselves, they often drive the badger out from the hole he has dug for himself, and take possession of it, as a safe retreat for themselves, and a secure nest for their young.

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## ON THE INFLUENCE OF TASTE. ON DOMESTIC AND SOCIAL LIFE.

*Continued from p. 120.*

“ Taste promotes the tranquillity and happiness of families and friends.”

I AT first divided my subject, concerning the influence of taste, into the scopes of individual, of domestic, and social, or public happiness. I have in my last paper endeavoured to describe the natural weakness of human nature,—its tendency to the fruition of animal pleasure,—its disappointment in the expected continuance of young delights,—its self abasement, disgust, and chagrin,—together with its various, but abortive attempts, to fill up that infinite vacuity, which is left in the rational soul, when man, rejecting intellectual nourishment, feeds upon garbage, leaving the

ambrosia and nectar of Olympus, for the husks of the prodigal, and the muddy waters of Lethe.

Here, (good Mr Editor,) I think I see some of your fair male or female readers, launching the Bee into eternity, by hurling it across the room like a cock-chaffer, with a Heigh ho ! what have we gotten here? A bore,—a twaddle,—a cruel lounge of sentiment. I always thought the Bee had too much of dull *savarez*. But now I expect in a week or two to see it stuffed with extracts from Whitaker, against Gibbon, Blair's sermons, lord Hailes's defence of Christianity, or some such sad conundrums.

My dear friend ! no such matter, I assure you ! Do you really think I could expect a fashionable creature to sit and meditate upon one's end for five minutes, when any thing clever was a doing ? No, no ; But my dear ! it is Sunday, you know, and it rains like a duck day ; all the prigs at church ! not a soul on Princes's street, and *Scratchon!* the hair dresser won't be here this age ! Come, will you step into my study for a minute or two, and look at Sherwin's print of the death of lord Chatham ?

So you have discovered, have you ? that your father's park, and shrubbery, is not the garden of Eden, and that neither London nor Edinburgh are the new Jerusalem.

I am extremely sorry for you my dear ! I remember well being like to hang myself about twenty years ago, when I made the same most notable discovery.

I had received, like you, what is commonly called a capital education, that is, being made a very perfect automaton, to read, write, calculate, ride, dance, fence with the small sword, because pistols you know are now only used, perform the minuet de la cour, because you know country dances, a la mode champetre, are only to be practised in real life,—to play all kinds of music by the book and not by the heart, which you know destroys a performer totally; to admire Handell's church anthems and prayers,—and to laugh at the church and, churchmen! To know the title pages of an amazing number of fashionable books,—to dress negligently among my inferiors,—to be dry, or *non chalant*, in company,—to avoid all brutal expressions of kindness to my relations, and all odious connections with provincials, pedants, shopkeepers, mechanics, and unfashionable old people. To make a genteel little speech at a country meeting, or move an address in either house of parliament,—to repeat a few agreeable passages from the Latin and English classics, and a few more from Rochefoucault, Mandeville's fable of the bees, Voltaire's philosophical dictionary, the *Pucelle d'Orleans*, and a few other books of wit and humour,—to use the slang language of statuaries, painters, architects, musicians, and pugilists, with precision and proper effect,—and to play all kinds of fashionable games at cards or dice, without making wry mouths, losing my temper, or rising up from a table where I was overmatched by playing with gentlemen, who were as good as myself, though they might not perhaps sport

it in public, with silk stockings, from the same shops I might think it genteeler to deal with,—and last, though not least in importance, I was taught to apply a little *hartshorn* to a friend or neighbour, when I found him exceedingly uneasy about his domestic happiness. This I was taught to do with all imaginable grace and address ; and to put a final period to his sorrows if he should apply to me for the utmost satisfaction !

These noble attainments was I taught, or rather attempted to be taught ; for I must tell you plainly, that I rebelled against my teachers, and would have none of their advice.

On the contrary, I kept my heart soft, my head hard, and my breast steeled, against all this munificence of barrel organ education.

I began with honouring my father and my mother, not that my days might be long upon the land ; but because I listened to the voice of nature that cried within me. Loving them, I loved my kindred ; loving my kindred, I wished to do good to their friends, and to shine in the eyes of my domestic circle, which was composed of their connections. This led me to aspire to the love of virtuous fame, in a more extensive circle, and this attainment I soon found to be impossible, without that taste and discernment which enables us to judge intuitively of the insides of things, after having examined their outward forms and aspects.

My mind became a kingdom to me, from whence I travelled into those that were foreign to me, studied their manners, their principles, and their customs, without either partiality or disgust.

I did not attempt to be a wonderful Christian. I was satisfied with such attainments, and with such pursuits, as were suited to my genius and abilities.

Like a good general, I endeavoured always to keep upon strong ground ; and, if dangerously attacked, without having the expectation of victory, to make a good and handsome retreat, keeping up a respectable *petite guerre*, without attempting pitched battles, except when absolutely necessary to my safety and honour. By the constant use and improvement of this faculty of taste and discernment of what is true, excellent, and beautiful, a faculty which, like the ethereal fire, is universally diffused, and can be called forth always by the attention of social intercourse, I rendered myself independent and happy. In the pursuits of useful and agreeable knowledge and occupations, I did not bear down, like a mad admiral, upon a whole fleet of pursuits, but singled out objects for which I thought myself able ; and breaking thus the line, I carried off my prizes, and discomfited the enemy. I had never any occasion, like the commissary, to throw myself down upon settees in despair, to exclaim,

“ My God what a fatigue it is to be a gentleman ! ”

No, no ! it became my nature, but not my profession.

It was not necessary for me always to sleep, or stretch, or yawn, or lounge, or sit in the silent grave of whist ; or fret at ground games, when there were no blood and thundering events to rouse up my mettle for the day.

I enjoyed the pacific flow of my full imagination, and the pleasing rotation of my rational sameness. I joined the crowd always, when I had leisure; and took my own road when I saw the finger post that pointed to my duty, and to my chosen pursuit.

These, my dear friend, are the effusions of experience, and not of fancy;—take them, living, as they rise,—use them,—try the experiment, and when we meet again let me know the result. But I hear Scratchoni's bell. Adieu, *au revoir, vive la joie, et le bon gout.*

Thus, Mr Editor, have I troubled you with a dissertation consisting only of one short paragraph, which I flatter myself, from its length, at least, will not prove tedious to your readers, and am, with regard,

your humble servant,

A. B.

## DISQUISITIONS ON ANIMAL NUTRITION.

HAVING met with some curious elucidations respecting the natural history of the pangolin, (an account of which singular animal, accompanied with a figure, was inserted in the Bee, vol. x. p. 85,) together with some interesting speculations on the mode of supporting animal life in general, by Adam Burt, esq; inserted in the second volume of Miscellaneous Dissertations, &c. respecting Asia, I beg leave to lay the substance of these before the reader, with some farther observations on the same subject.

Mr Burt, who dissected the animal with care, had an opportunity of observing several particulars that eluded the notice of Mr Buffon, who had only seen a

dried specimen of it. In particular, he observes, that a general rule established by this celebrated naturalist, *viz.* "that all animals which are covered with scales are oviparous," is clearly contradicted by the pangolin dissected by Mr Burt, which happened to be a female, whose uterus and organs of generation were evidently those of a viviparous animal. Its dugs were two, seated on the breast.

In regard to other particulars, he observes, "that there are on each foot five claws, of which the outer and inner are small when compared with the other three. There are no distinct toes; but each nail is moveable by a joint at its root. It has *no teeth*; and its feet are unable to grasp. The nails are well adapted for digging in the ground; and the animal is so dextrous in eluding its enemies, by concealing itself in holes, and among rocks, that it is extremely difficult to procure one.

" The stomach is cartilaginous; and, analogous to that of the gallinaceous tribe of birds: it was filled with small stones and gravel. The inner part of the stomach was rough to the feel, and formed into folds, the interstices of which were filled with a frothy secretion. The guts were filled with a sandy pulp, in which, however, were interspersed a few small stones. No vestiges of any animal or vegetable food could be traced in the whole *prime vie*."

From the habits of this animal, and these particulars respecting the stomach and intestines, our ingenious naturalist hazards a conjecture, which, though, bold at first sight, appears upon a nearer investigation, to be not entirely destitute of probability. His

conjecture is, That this animal derives at least a part of its food, if not the whole of it from *mineral* substances. This opinion appears bold, rather perhaps because we have not been accustomed to think in this manner, than because it is contradicted by experience. It is indeed true, that the greatest part of animals which come under our more immediate observation, draw their principal nutriment either from the animal or the vegetable kingdom ; and because this rule is *general* we have, perhaps too hastily, concluded it is *universal*.

Our acute naturalist observes, “ that we have no clear idea of the manner in which vegetables extract their nourishment from the earth ; yet the fact being so, it might not be unreasonable to suppose, that some animal may derive nutriment by a process somewhat similar.” If we adopt the maxim of Buffon, ‘ *que tout ce qui peut être est*,’ (whatever can be, is,) we shall be led to this conclusion. “ When other substances than stones,” Mr Burt adds, “ shall be discovered in the stomach of this animal, my inference from what I have seen must fall to the ground.” Here, however, we think the concession is too liberal. It may happen that there may be animals, which though they can derive nutriment from mineral substances, may likewise be capable of extracting nutriment from animal or vegetable food. All carnivorous animals, we know, may be brought to live on grain. As justly might we then conclude, that if any kind of grain should be found in the stomach of a carnivorous bird, intermingled with animal substances, that this bird derived its whole sustenance from the grain, as that

the pangolin could derive no sustenance from the mineral substances found in its stomach, if a single particle of grain should be discovered there.

Setting aside therefore this concession of our author as unnecessary, we proceed. "But if", says he, "like other animals with muscular and cartilaginous stomachs, this singular quadruped consumes grain, it must be surprising that no vestige of such food was found present in the whole alimentary canal; nor can it be inferred from the structure of the stomach, that this animal lives on ants or on insects."

He observes farther, from the report of experiments by signior Brugnatelli of Pavia, on the authority of Mr Crell, "that some birds have so great a dissolvent power in the gastric juice, as to dissolve in their stomachs flints, rock chrystral, calcareous stones, and shells: and nothing, we should think, that is soluble in the stomach of animals, may not be thence absorbed into the circulating system; and nothing can be so absorbed without affecting the whole constitution." But if nature prompts certain animals to seek with eagerness, and to swallow with avidity, certain mineral substances, as other creatures show a natural fondness for animal or vegetable substances, from which we conclude they derive their nourishment, is it not equally natural to suppose that the first set of animals equally derive nutriment from the substances nature prompts them to choose, as the last?

He farther observes, that, though Spallanzani found by experiment, when he attempted to feed fowls entirely upon stones, that they died; yet it can by

no means be inferred from thence, that they derive no nutriment from the stones they naturally pick up. We know that man eats salads by choice, and no one will doubt that he derives nutriment from them ; yet I question not, that were men to be fed entirely upon salads, for any length of time, very few could live upon that food alone. Even fresh succulent fruits, which are invariably admitted to be highly nutritious to man, when taken with other food, would, if taken alone, prove fatal to *many* of the human species : but there can be no doubt that the result of the experiment would prove fatal to the *whole* human race, should it be conducted in the same manner with those of Spallanzani, on chickens. Were a philosopher, upon dissecting a human stomach, and finding in it some raw vegetables, to try if man could be fed on grafts alone, or any other vegetables that came to hand, there can be no doubt but they would all die. How false then would his conclusion be, if from this experiment, he inferred that man could derive no nutriment from raw vegetables ? How infinitely more erroneous would it be to infer, that no other animal could derive nutriment from raw vegetables of any sort !

Fowls, most assuredly, not only swallow, but digest small stones. Manufacturers who use dung of poultry, never, I believe, find it mixed with stones ; but as they require a daily supply of small stones, these must of course, be digested in the stomach, and be absorbed into the lacteals, from whence it is natural to infer, they contribute in one way or other to the health and nutriment of the animal.

From these, and other considerations, our author sees nothing absurd in supposing that the pangolin derives some part, of its nutriment from the mineral kingdom.

I will frankly own that these considerations have had so much weight with me, as to make me believe that we have too hastily adopted the opinion that animals can only derive nourishment from animal or vegetable substances ; and on taking a superficial glance of animated nature, there are innumerable facts present themselves that seem to give weight to this new adopted opinion ; a few of which I shall briefly enumerate.

1st, Live toads have been frequently found in the heart of the most solid stones, where no vegetable or animal substance could come near them. Here mineral substances alone would seem to have supported life.

2d, The *pholades* eats through the most solid rocks. It is true this animal always chooses its habitation in such places as can be moistened, at least at times, with sea water, from which some may suppose it derives its nourishment ; but can we suppose it would shew such a decided fondness for the stone itself, if it derived no kind of sustenance from thence ?

3d, Earth worms are not known to gnaw roots of any plants ; and are always found full of a slimy earth. They do indeed draw into their holes straws, and other decayed vegetables, which they possibly employ, in a putrified state, as food ; but we have no reason to think that, where these substances are not to be had, the worms would die for want of them.

4th, Sea worms, which are gathered by fishermen for bait, are in like manner full of sand: nor do we know that they ever search for vegetable substances of any sort. Indeed these abound most where nothing of that sort could be had.

5th, Gold and silver fishes, and several other sorts of fishes, can be kept alive for a long time in pure water, in which no kind of animal or vegetable substance can be perceived. On what then do these subsist?

Should it be said they derive their nourishment from small insects they extract from the water, it would be only putting back, but not removing the difficulty; for still the question will recur, on what do these small insects feed?

I know these fishes will eat bread, if given them, as well as flies, and several other kinds of animal food; but this only tends to show that nature hath endowed them with a power of digesting various kinds of food. Man could live on either flesh, or grain, or succulent fruits or salads; he may be therefore called a carnivorous, a granivorous, a frugivorous or a herbivorous animal. He might be fed upon any one sort; but he would also take others with avidity, if they came in his way, like the poor fishes we treat of.

6th, Is it, however, certain, that man does not derive sustenance from the mineral kingdom, as well as from the animal and vegetable substances he devours? Does the water he drinks, which is so essentially necessary to his existence, furnish no part of subsistence to him? it seems unreasonable to suppose it. The following case, among many others, confirms this idea.

About twelve years ago, a woman in Rossshire lived several years, without tasting any other kind of food, but pure water alone. The fact was authenticated in the most undeniable manner ; and Sir John Lockhart Ross assured me, that he visited her after she had been on that regimen several years, and found her complexion fresh and clear, her breasts plump, and her body far from being in that emaciated state he expected.

7th, I have often thought it was a matter of great difficulty to account for the manner in which fishes in the sea were sustained. The number of these is very great ; probably much greater, taking into the account the whole depth of it, than the same extent of surface on land ; yet few are the vegetables produced in the bottom of the sea ; and of these few, a very small portion of them are consumed by the animals which inhabit the ocean. We know, in short, not perhaps a dozen of animals that inhabit the ocean which feed upon vegetables of any sort. On what then do fishes live ? the answer is ready ; on other fishes. And true it is, that most kinds of fishes devour those that are smaller than themselves. But still the difficulty recurs. If large fish devour smaller, what do these smaller ones, down to the very smallest, live upon ? They must come at last to derive their nutriment either from vegetable or mineral substances. But I have already said, that the vegetable substances produced in the sea are few ; and these few are not consumed by animals, in a great degree. It would seem therefore undeniable, that some of the marine ani-

imals must derive their sustenance from a similar source with that of vegetables.

8th, This doctrine seems to be peculiarly applicable to the herring. Herrings are known to come in shoals, and in so close and compact a body, as sometimes, for miles together, to admit of being lifted out of the water in buckets, nearly full of fish. The fish, when in this situation, are usually fat, and in the highest state of perfection; but where those little fishes find food in such abundance as to keep them in such high health, if they do not, like the stalks of corn, draw sustenance from the element in which they live, it is impossible to conceive. They do not devour other fishes, as is common among the inhabitants of the water; for all fishermen agree in saying that nothing is ever found in the stomach of a *healthy* herring, except a small quantity of slimy matter, more resembling mineral than animal substances. This then seems to be one clear evidence of fish deriving their food entirely from water, as plants do on shore. Myriads of other sorts of fish, of smaller size, may probably derive their food from the same source, which, in their turn, like vegetables, furnish subsistence to animals of a larger size.

From all these considerations, I think there is reason to believe, that there may be some animals, which, like vegetables, derive the whole of their subsistence from the mineral kindom: that the greatest part of them draw the principal part of their subsistence from the vegetable and animal kingdoms; but that there are, perhaps, none which do not derive

a part of their sustenance from the mineral kingdom.

Experiments, however, are here wanting to develope facts so fully as to remove all kind of doubt on this subject.

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## ON SILK-WORMS.

### LETTER FROM MISS HENRIETTA RHODES.

SIR, *To the Editor of the Bee.*

YOUR mind seems to posess such a degree of liberality, as well as energy, that I make little doubt but that you have ascribed my silence to its right cause, and will readily extend that pardon to me, which I must believe I deserved before I dared solicit it. To write a letter to you, without having any thing material to communicate, would have been an infringement upon that time, which is so valuable to yourself and others ; I, therefore, determined to wait until I received an account of the eventual success of a further experiment, which I had intreated a friend to make upon the lettuce, as food for the silk worm. As for myself, the removal to my new habitation occupied so much of my time and attention, that I was obliged to abandon the design of rearing any this summer. The friend I speak of is miss Croft of York, who very obligingly kept a few silk worms *entirely* upon lettuce leaves. She assured me they were equally as strong and healthy as any she had seen ; and that, when, by way of trial, she has dropped a mulberry leaf among the lettuces, they

tasted of the former, but soon returned to their usual food. The silk collected from these, she sent to the Adelphi society in London.

I must now tell you, that she fitted up a small room *with a stove, in which she constantly kept fire.* I am sorry to add the disappointment which attended her manufactory, because her persevering ingenuity merited the highest success ; but I imagine it arose from the extraordinary weather we have had ; for the rain has been so incessant that we have numbered but few dry days this summer. She had so many silk worms that she found it impossible to devise means to dry the mulberry leaves *thoroughly*, before they were given to them ; and in consequence of their living perpetually upon damp food, they had an epidemic sickness, and *many* thousands of them died. I account for her loss in this way, because I have always understood that a wet summer in Italy is productive of exactly the same effects. It could not be owing to cold, because her room was kept properly heated. What general Mordaunt has done with his manufactory, I have not yet heard ; but I must be a petitioner to him soon for eggs ; and if I gain any information from him, which I think you will like to know, I will immediately acquaint you with it.

You have treated the subject with so much judgement, that I am more than ever convinced of its practicability ; but I must differ from you in the mode of constructing your *hot house*, from which *light*, I should think, ought not to be excluded. Ought we not to study the situation in which that creature is placed.

by providence, whose culture we are solicitous about? The silk worm seeks no shelter, and is a native of that climate where there is, in fact, hardly any night. If I am mistaken in this idea, I have always been so strongly prejudiced by it, that I have ever fancied those silk worms grew less rapidly that were farthest removed from the windows, and have therefore constantly kept moving the pans. I rather think, too, that the silk worm *owns no night*; for I never could perceive that it slept in its worm state, unless that inertness which is discoverable when it parts with its skin, be called sleep. Did you ever remark the number of eyes the silk worm has? There appears to me to be many *clusters* of them. Perhaps they may have been given it to enable it to endure the *perpetual* day, which may be necessary to the completion of its labour! If I could choose a situation for them, it should certainly be a southerly one.

Your idea of a moveable canvas frame, to be placed over the lettuce beds, is excellent, and I shall adopt it next year; the lettuces are, however, even in a dry season, full of moisture, especially those that have cabbaged, which are the sweetest and best.

If ever you receive any eggs from the large worm which Sir William Jones has discovered, I shall greatly thank you for a few of them; and certainly those might be sent to us at any time; for surely it would not be difficult to find a person on board of a ship who would take care of a *dozen*; and as many lettuces, planted in a little wooden box, might be kept growing against the time of their hatching.

You who have perhaps known the difficulty of these things, will no doubt smile at the ease with which I have settled it, and patiently wait for the more sure, though slower method, which your ingenious relation has adopted \* and to which I give my full admiration, and fervent wishes for success.

The year before last, I had a *black* silk worm sent me from South Carolina, which my friends wrote me word was of a new and much more hardy sort. They grew to an uncommonly fine size, and the cocoons were larger than any I ever had; but when I came to wind them, I found the texture of the silk so fine, and that it was fixed so firmly together by the gluten, that it was utterly impossible to reel off the thread. I hope these are not the sort that Sir William Jones speaks of; for if so, they must be *carded* before they can be manufactured. I hope my frank will convey a few of them to you, and then you will see the impracticability of extricating the silk †. Whenever you can spare a few moments I shall feel highly gratified in the pleasure of hearing from you: and I remain, Sir, your much obliged and very sincere friend,

Bridgnorth,  
Sept. 12. 1792. }

HENRIETTA RHODES.

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OBSERVATIONS SUGGESTED BY THE ABOVE.

THE public are much obliged to miss Rhodes for the many useful hints she has communicated on this very interesting subject. The foregoing letter seems

\* I have not the honour to number this gentleman among my *relations*, though we were schoolfellow, and intimate friends from our earliest infancy. *Edit.*

† I have many hundreds of these now by me, which I can put to no use.

fully to prove the practicability of nourishing silk worms *entirely* upon lettuce, if they be kept in a warm enough temperature of the air, while on that food; indeed it appears that these worms not only lived upon lettuce, but even preferred it to mulberry leaves.

This fact being established, it next will be necessary to ascertain which kinds of lettuce answer the purpose best. There are about thirty kinds usually sold in the seed shops, which differ very much from each other. The tenderest appears to me to be that called *Spanish montree*, and next to that the *ice*, or *coss* lettuce when cabbaged. This last would probably resist rain the best. If any person wishes to make a comparative trial of all the kinds, at the proper season of the year, I shall endeavour to procure the seeds for them, if they have no other opportunity of obtaining them.

As we now see that the silk worm eats lettuce, and thrives upon it in proper circumstances, it is by no means impossible but other kinds of food may be found which will answer the same purpose. I recommend the chicorium as a proper plant for trial. The *chicorium intybus* is, like lettuce, a lactescent plant; the common endive is also of the same class.

There is nothing unusual in the circumstance of a certain degree of heat being required to make animals thrive, when kept upon a particular kind of food, that could be dispensed with if they were fed on another sort. Farmers now begin to learn, from experience, that bullocks fed upon turnips, if kept

in a cold place, are apt to be so lax in the belly as not to fatten quickly. If they be kept warm, this inconvenience is not felt ; the animal is at all times in a more costive state, and comes on in fattening much more rapidly. This is a branch of rural economy not so generally understood as it ought to be ; and miss Rhodes has great merit in having suggested the idea that the health of the silk worms may be affected by the same circumstances.

As to the article light ; it is very possible I may be mistaken in that respect, having formed my opinion merely from the report of others. When I said that windows might be saved in houses to be made for silk worms, it was my intention however only to suggest that such large windows as are required in stoves for plants, are by no means necessary ; so that the great expence of glass might be saved. Whether this lady's opinion, that light is of great utility to the silk worms, or the opinion of Mr Wright of Paisley, with several others, that they thrive better in the dark, be the best founded, I pretend not to say ; but, as there is a doubt on this subject, it would seem that if the worm be affected at all by this circumstance, it can be but in a slight degree, so that it cannot be a matter of very great importance. It is proper however it should be adverted to by experimenters.

However this may be, there seems to be no reason to hesitate in agreeing with miss R. in approving a south exposure, where that can be commanded ; not only because that is the warmest, and therefore will save most fuel ; but also because the heat thus produced is less liable to generate noxious vapours, than

that by a stove. I should think therefore that a south exposure, with a few glazed windows, and a considerable number of windows closed with shutters, that could be opened during the day time, when the sun shone bright, and the weather was in other respects favourable, would be the most eligible.

Every person who has had the management of silk worms on a large scale, complains of the noxious vapour that is generated by them, unless they be kept very clean, and the house properly ventilated. Dr Anderson in Madras has found this kind of ventilation so necessary for the health of the animal, especially in damp weather, that he has contrived a kind of cane matting for admitting the air freely; which has there answered to admiration. It is surprising however that in Italy, and other warm climates in Europe, where the silk worm has been so long reared, so few contrivances should have been adopted for obviating this inconvenience; for it seems to be an undeniable fact, that the silk worm itself dies in great numbers, in every case where this article of cleanliness is neglected.

By some late experiments made by *M. Faujas de St Fond*, and recorded in his history of Languedoc, it appears that the silk worm is much hurt by this foul air. From the experiments of Mr Ingenuhousz we also know that all decaying leaves produce mephitic air in great abundance; and as silk worms are constantly fed upon leaves in this state, it must necessarily abound very much in the places where they are kept, if proper means are not taken to remove it. As this mephitic vapour is more weighty than com-

mon air; and as the silk worm is in Italy always kept upon solid tables or shelves, which will prevent it from sinking below them, it follows, that the worms themselves, unless when the house is freely ventilated, must be always kept in the mephitic region; and if they are not suffocated by it directly, like the dogs which are thus poisoned in the grotto *del Cane* in Italy, they may be subjected to various disorders that prove hurtful. This seems to be indeed one of the unobserved causes of those unaccountable mortalities that sometimes destroy the best founded hopes of the silk rearer.

If this should be the case we shall probably be able to obviate it by adopting a cleanlier mode of management than is there practised. Dr Anderson of Madras has thrown out some hints that will greatly facilitate this business.

One of the most difficult branches of the management of the silk worm hitherto is the cleaning without bruising them. To avoid this inconvenience, the peasants in France and Italy frequently allow the whole litter to remain without ever cleaning them, which is the cause of that unwholesome stench, that has been so often remarked by those who visit the places for rearing silk worms in these countries. This difficulty, he finds, may be effectually removed by providing a net; or what would be still better, a wire bottomed frame, wrought into large meshes like a riddle. Have that made of a size exactly sufficient to cover the wooden box in which the worms are kept. When you mean to shift them, spread fresh leaves into the wire basket; and let it down gently over the worms.

till it comes within their reach. They no sooner perceive the fresh food than they abandon the rubbish below, and creep through the meshes, so as to fix themselves upon the leaves; then by gently raising the fresh basket, and drawing out the board below, (which ought to be made to slip out, like the slip bottom of a bird's cage,) you get off all the excrements and decayed leaves, without incommoding the worms in the smallest degree; and along with the litter you will draw off an inch or two in depth of the foulest mephitic vapours. To get entirely rid of these, the board, when thus taken out, should be carried without doors, and there cleaned; and the slip board immediately replaced to receive all the excrements and offals. After it is replaced, the wire frame that had been elevated a little, may be allowed to descend to a convenient distance above the board, without touching it. Thus will there be left a vacant space for the mephitic air to fall below the worms, so as to allow them to inhabit a wholesome region of the atmosphere.

When a fresh supply of food is to be given, before cleaning, the wire frame ought to be let down as close to the board as can be safely done, and another wire bottomed frame put over it, with fresh leaves, as before described. When the worms have abandoned that in their turn, let the slip board, together with the lower wire frame, be drawn out and removed; and so on as often as necessary. To admit of this alternate change, every table, consisting of one slip board, ought to have two sets of wire-bottomed frames of the same size; the slip board to be always put into its place immediately after it is cleaned, and the wire

frames reserved to be afterwards placed over the other.

By this mode of management it is probable that the worms would be saved from the diseases engendered by the mephitic air ; and the numerous deaths that are the consequence of it avoided.

But still farther to insure this salutary effect, another measure, recommended by some philosophers, might be conjoined with it. Every one now knows that quicklime absorbs fixed air with great rapidity. From this known property of quicklime *Mr Blancard*, a gentleman in France, by way of experiment, went even so far as to strew quicklime upon the worms themselves\*. This harsh process, he found not only did not kill the worms, but they continued in health, and more vigorous than before, and yielded larger cocoons than others which had not been so treated. Instead of this mode of applying quicklime, however, I should advise rather to strew a thin stratum of fresh slaked quicklime upon the slip board, each time it was cleaned, immediately before it was put into its place. This would absorb the mephitic gas as it was generated, and descended upon the surface of the quicklime. Thus would the worms be kept continually in an atmosphere of pure air†. Were the walls of the apartment to be frequently

\* *Mémoires par la société royale d'agriculture, de Paris ; trimestre de printemps, 1789.*

† To put this question beyond a doubt, *Mr Blancard* made the following comparative experiments, which were several times repeated.

“ I procured,” says he, “ four glass jars, nine inches high, and five in diameter, closing the mouth with cork stoppers. After which I placed in each of them, in their second life, (so I translate *mue*, which means the stage between the different sicknesses,) twelve silk worms, which were fed four times a-day; and which I confined in this kind of prison all

washed with quicklime and water, it would tend much to promote cleanliness at a small expence, and augment the healthiness of the worms, as well as that of the persons who attend them.

The circumstance of the silk worm never sleeping during the night, is a new particular respecting the natural history of this animal, the notice of which we owe to miss Rhodes, and which I suppose is perfectly well founded. From this very circumstance, however, it would seem that nature had intended that light or darkness should make little difference to this singular animal. My fair correspondent has, I should suppose, committed a small mistake when she supposes the silk worm is a native of polar regions, where only, there is no night at one season of the year; for though some parts of China, which seems on all hands to be allowed to be the native place of the silk worm, approach to the polar circle, yet, as the greatest part of that country extends towards the tropical regions, where the day and night are nearly of an equal length, we may rather believe it was there, where the mulberry thrives best, that the silk worm was first produced. But this is a matter merely speculative; for we know that nature may

their life, without taking away either their dead companions, or their ordure or litter. I sprinkled with chalk the worms of oniy two of these jars, and kept the two others to compare with them.

" In those without lime, I never obtained neither more nor less than three small and imperfect cocoons, (*chiques ou bouffard,*) and in the two that were sprinkled with lime, I had very often twelve, and never less than nine fine full sized firm cocoons."

This experiment affords the most satisfactory proof of the utility of this proceſs. From a number of trials he found, that even when the worms were covered with a *very large* proportion of lime, they never were in any way incommoded by it,

be in many cases helped by art, and even in some cases improved by adopting practices directly contrary to it. If bees were left without hives, which nature provides for them only in a very imperfect manner, the whole race of them in Europe would quickly be exterminated; and though cattle were doubtless intended by nature to run abroad in the open air, and calves to enjoy the benefit of light; yet it is well known that neither of them fatten so well in these circumstances, as if they be confined in total darkness, and there fed abundantly.

The mortality among the worms, during this wet season, is exactly what might have been expected. Had the lettuce, however, been kept under a moveable cover from rain for a day or two before using, especially if open to the sun at the same time, which, in a proper exposure, may be in some measure effected, this evil would have been obviated. Since the receipt of miss Rhodes's letter, I have been favoured with the following communication from another lady, who is exceedingly accurate in her observations, and who is, from motives of philanthropy, extremely anxious to forward this undertaking. It tends to show that by great attention it might be possible, in some cases, to obtain even freshly dry mulberry leaves during a rainy season, were the superintendants of silk works extremely attentive; though on a large scale, where many persons are employed, this would be a matter of considerable difficulty.

“ Miss \_\_\_\_\_ had got a dozen mulberry plants last year, but not being sufficiently advanced to be of much use, she sent to \_\_\_\_\_ for her general

supply. To save trouble, and for experiment, she had shoots brought her, 8, 10, or 12 inches long; the leaves on the under part were stripped off, and the ends of the shoots put into water—the water renewed daily. By this means the leaves on the upper parts of the shoots were kept in perfect good order, and though sufficiently, or indeed perfectly fresh, could never be wet. The few worms she had, were supplied twice a day with these leaves,—some of them attained the size of  $3\frac{1}{4}$  inches, others 3 inches, none below  $2\frac{1}{2}$  inches. One had 420 eggs, another above 300, and none below 270, which shows the leaves were in good condition.

“ The worm arrived at as large a size as Mr Andrew Wright’s at Paisley, from whom the eggs came; and the average number expected from each female, that gentlemen writes, is, 250.

“ Mr Millar writes in his dictionary, or elsewhere, that it hurts the mulberry less to take off the shoots altogether, than to strip the shoots of the leaves.”

There can be no doubt but by this practice, if a basin were provided, with a proper apparatus for receiving the shoots, and exposed to the sun or wind, under a roof, it might be possible to find dry leaves even during rainy weather, though at a considerable expence, where the quantity of worms is great. Perhaps the best way to have very fine leaves, and healthy plants of mulberries, is to have them cut close to the ground every winter, as we at present do with oziers for baskets.

I am much obliged to miss Rhodes for the cocoons of the black worm she was so obliging as to send.

They are very large and beautiful. I should by no means despair of converting these to use, though the first experiments were not successful. From Dr Anderson's trials it appears, that, from accidental circumstances, the silk will be sometimes so weak as not to admit of being reeled off without the greatest difficulty; though, from the same species of worms, the silk is, in other circumstances, as strong as could be wished. It may also happen that the same solvent which is sufficient to dissolve the gluten of the silk produced by one kind of worm, will not be sufficient to act upon that of another. On this head a good deal of elucidation is necessary, though this paper is too long to enter upon it at present.

Though I fear it will not be such an easy matter to get sailors to attend to silk worms on a sea voyage, as miss Rhodes seems to apprehend, no endeavours on my part shall be wanting. Sir William Jones writes to me, that though he has the greatest possible desire to promote enterprises of this sort; yet he is so much engaged in the active functions of his office, that he can spare much less time to such economical pursuits than he could wish; and the little time he can spare is so totally devoted to his literary Asiatic researches, that he cannot flatter himself with the hope of being able to afford me all the assistance he could wish: but he has no doubt his friends, who are less taken up, will do it with alacrity. From Dr Anderson's exertions, which are entirely in the line of economics, every thing possible may be expected. If ever the worms can be brought hither by being alive for some part of the voyage, it must be, I should

imagine, by the attention of some lady on her passage home, who might find it an agreeable kind of amusement to look after a few. Such a lady might thus, justly, acquire celebrity in future, by giving her name to that breed of silk worms, which owed their existence in Europe to her patriotic attention.

I beg leave to return my warmest acknowledgements to miss Rhodes for this interesting communication; and the obliging terms in which it is conveyed. It will give me singular pleasure if I can be in any means the instrument of disseminating the useful information, that her talent for accurate investigation has enabled her to give on this branch of natural history.

J. A.

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### ANECDOTE.

A WOMAN went to find a monk, and said to him that she had stolen a packet which charged her conscience. *You must restore it*, answered the monk. But, father, I am not suspected, and if I restore it, I am dishonoured. Well, answered the monk, bring the theft to me; I myself will make the restitution. The woman liked the expedient wonderfully, and in a short while after she put into the hands of the monk a basket, well wrapped in linen with an address on a card. The monk took the basket, and the woman retired with precipitation. The monk carried the deposit in triumph to the convent; and says to his brothers on entering, *Here is my work*. At the same time they heard the cries of an infant. It was indeed a new born child wrapped up in a basket, which the good woman had confided to the monk, as a packet which charged her conscience.

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POETRY!

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SONNET.

*For the Bee.*

O SAY Maria! why is gentle love  
A stranger to thy mind?  
Which pity and esteem can move,  
Which can be just and kind.

Is it because you fear to share  
The ills that love molest?  
The zealous doubt, and tender care,  
That racks my am'rous breast?

'Alas! by some degree of woe,  
We ev'ry bliss must gain;  
That heart can ne'er a transport know,  
That never felt a pain.

ENON.

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FOR THE NONSENSICAL CLUB.

*For the Bee.*

ALL whimsical people come hither,  
And choose a nonsensical strain;  
For who'd be a wit in hot weather,  
T' endanger the losf of his brain.

'Tis nonsense we sing, and we deal in,  
And 'gen'rously deal it about;  
And if common sense chance should steal in,  
We kick the precise rascal out.

Whereof, forasmuch, notwithstanding,  
Moreover, to wit, further more;  
Sure never were words so commanding,  
So sweetly adapted before.

Thus free from restraint, in we rattle,  
Inslav'd by no precepts or rules,  
Whilst those who in form prattle prattle,  
Are nothing but sensible fools.

Should nonsense from human kind sever,  
What numbers must straight away run,  
The beau pick his teeth must for ever,  
The chatt'ring coquette be undone.

The bards would have little to write on,  
 The lawyers have little to say;  
 The critics would nought have to bite on,  
 The Non Cons not know how to pray.

Besides, for a plague wit is sent t'ye,  
 Its owners for ever are poor;  
 Whilst nonsense is vested with plenty,  
 Whereof you may see now therefore.

### GLEANINGS OF ANCIENT POETRY.

#### AGAINST FOREIGN LUXURY.

BY W. BROWN.

AND now ye British swaines, (whose harmless sheepe  
 Than all the world's beside I joy to keepe,) ' .  
 Which spread on every plaine, and hilly would,  
 Fleeces no leſſe esteem'd than that of gold,  
 For whose exchange one Indy jems of price,  
 The other gives you of her choicest spice,  
 And well she may; but we, unwise, the while,  
 Lessen the glory of our fruitful isle,  
 Making those nations think we foolish are,  
 For baser drugs to vent our richer ware,  
 Which (save the bringer!) never profit man,  
 Except the sexten and physitian.  
 And whether change of clymes, or what it be,  
 That proves our mariners mortalitie,  
 Such expert men are spent for such bad fates  
 As might have made us lords of what is theirs.  
 Stay, stay at home, ye nobler spirits, and prise  
 Your lives more high then such base trumperies;  
 Forbeare to fetch; and they'le goe neere to sue,  
 And at your owne dores offer them to you!  
 Or have their woods and plaines so overgrowne  
 With poysnous weeds, roots, gums, and seeds unknowne;  
 That they would hire such weeders as you be  
 To free their land from such fertilitie.  
 Their spices hot, their nature best indures,  
 But 'twill impaire and much distemper yours.  
 What our owne soyle affords befits us best;  
 And long and long, for ever may we rest  
 Needlesse of help! and may this isle alone  
 Furnish all other land's, and this land none!

BRITISH PASTORALS.

## NOTICES OF IMPROVEMENTS NOW GOING ON IN INDIA.

*Continued from p. 75.*

THE following communications respect chiefly the bread fruit tree.

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*From Dr James Anderson to Richard Molesworth, esq.*

DEAR SIR,

I AM favoured with your letter of the 2d of August last, and am sorry you have been disappointed in the teak and cinnamon trees which I sent you last year.

An alligator pear tree, however, having been sent me by colonel Kydd of Bengal, in a box of a new construction, in which I suffered it to remain three months in the shade before it was set out in the open ground, where it still continues healthy ; I have directed two such boxes to be made, in which two teak and two cinnamon trees shall be planted ; and as captain Gerrard has obligingly promised to take particular care of them, I have no doubt you will receive them both safe on the arrival of the Deptford.

If they are sent to the West Indies, they will soon yield seeds ; my cinnamon and bread fruit tree, are already in flower, and the teak gives ripe seeds in eight or ten years.

You will see by my correspondence last year, that we have constructed reels here, which answer very well, as the skeines made on them are afterwards placed by the silk weaver on a reel made of five slender pieces of bamboo, with a thread stretched from the eight extremities of four of the pieces, in the manner of the braces of a drum, and serve as the flies of this simple reel ; the fifth piece of bamboo being the pivot or center.

From this reel he winds the silk on bobbins with the utmost facility, and no silk can possibly work more freely ; but when your model arrives, I shall pay every attention in my power to adopt the whole or any part of its construction, to the improvement of this business, as it

is of much consequence to introduce the best mode in a country where the people are much influenced by custom.

The attention you have paid to my request in the promise of a reel, induces me to hope that this country, having the thermometer always between seventy and an hundred degrees, may rival the greatest establishments in the culture of silk ; in Bengal, I believe the heat is sometimes greater, and in China much less. I am, &c.

*Fort St George; Jan. 19. 1792.*

*From Nicol Mein, esq. to Dr James Anderson.*

DEAR SIR,

MR ANDREWS and I have this instant returned from a trip to Allitory, a village about four miles distant from this, where there is a garden belonging to the nabob, in which we have found eight or ten bread fruit trees, two of which are very stately, and have fruit upon them, which is about the size of my clenched fist, and externally has the appearance of a young jack.

The fruit grows from near the top of the branch, and comes out of a sheath.

The branch, on being broken, exudes a viscid milky juice.

The leaf resembles a good deal a fig leaf; but is much longer and more sinuated.

By this tappall, I send you two of the leaves enclosed in a sheet of paper.

I have sent for a Mootchy, to make a drawing of a branch from the tree with the fruit upon it. From its appearance I imagine it may be propagated by cuttings, in the same manner, and as easily as the fig.

Mr Andrews says he was informed that the trees were brought from the Travancore country : five or six of the trees have been much mutilated, and their branches cut away.

It exactly corresponds, in appearance, with the description and figure in Cook's voyage, where he found it at Otaheite or king George III. island. I have brought with me some young shoots, which I have ordered to be planted in my garden. The leaves I have sent you, are not above

half the length that some on the tree are ; as the latter could not be so easily packed for the tappall—however, they will be fully sufficient for you to ascertain that it is the tree. I am, &c.

Tritchinopoly, Jan 20. 1792.

*From the same to the same.*

DEAR SIR,

I HAD the pleasure of sending you by the tappall, yesterday, two leaves of the bread fruit tree, of which I also gave you some account in my letter.

I now send you a drawing of a branch from the tree ; and shall, in a day or two, send you another drawing with the fruit upon it ; which I would have done to day, but did not choose to take off a branch with the fruit, without having obtained permission of the nabob's son Hussein ul Mulk.

Mr Trotter, surgeon, acquaints me there are a great number of these trees that produce fruit, in the Coimbatore country, and at Coimbatore itself. We have now a prodigious encrease of silk worms at Warriore, that are in a very healthy state, and produce a strong yellow silk, since the cessation of the rains. I am, &c.

Tritchinopoly Jan. 21. 1792.

*From Dr J. Anderson to Sir Joseph Banks, bart.*

DEAR SIR,

BELIEVING that it may be of useful consequence to the public, I have the pleasure to acquaint you, that the bread-fruit tree has been found in several of the southern parts of the peninsula, as you will see by the two letters I have just received from Mr Mein, head surgeon at Trichinopoly, of which I inclose copies, with the drawing which he transmitted me along with them.

Since the impression of my last publication, which was made a few days ago, and of which I have sent you copies, both in the Phoenix and Deptford, I have received accounts of the success of the silk worms at Palamcotta and Masulipatam, as well as of the recovery of those that had been diseased by the late rains at Trichinopoly. So that a breed of this insect is already established in an extent of six hun-

dred miles upon the coast, but it will rest with the company to render it productive.

The incursions of the enemy's horse, have prevented me from exploring the country, and therefore I hope you have received the white lac which I sent by captain Cunningham.

As you have no doubt heard of the success of our arms in Maissore, I must acquaint you, that in our new conquest of Bangalore, the mercury in the thermometer is at 57 in the morning, and 71, or 72 at noon, at this season.

I am, &c.

*Fort St. George,*

*Jan. 26, 1792.*

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*From Dr Anderson to Nicol Mein, esq.*

DEAR SIR,

YOUR letter, with the drawing of the bread fruit tree, did not arrive time enough for the packet, but I immediately sent a copy of both your letters, with the drawing which you sent inclosed, to Sir Joseph Banks, time enough to reach captain Gerrard before he got on board, thinking it of consequence to be known in England.

The slips you have taken will not grow unless they are shoots from the root, and that you have removed the root along with them; for neither the bread fruit, nor our common jack, which are both of the same genus, *viz.* *artocarpus*, can be propagated by this means, nor by the Chinese method, of potting, as it is called in England.

The jack, indeed, is readily propagated by seeds; but I do not understand that ever the *artocarpus incisa*, or bread fruit, has been raised in this way.

The only method of procuring a multiplication of the trees, is to lay the roots bare, by removing the earth round an old tree, and cutting through one or two roots, or as many as may be cut without injury to the trunk, and raising the upper extremity of the cut root above ground, where it should remain till it sends out a stem two or three feet in height; for if the root is dug up at an earlier period, the young stem is so succulent and tender, it is very apt to decay.

I have been so particular that you may communicate with the gentlemen in the Coimbatore country, and procure as many young trees as possible.

The reverend Mr John, and some philosophical gentlemen at Tranquebar, are the first Europeans who have cultivated this tree on the coast ; and by their means, Mr Roxburgh, I believe, was supplied with some plants which he sent to England, which were said to have come originally from Ceylon ; but as Mr Andrews has traced it from Travancore, where Mr Alexander Anderson found it under the name of the Maldive jack, it is probably a native of the Indian, as well as Pacific Ocean ; although the uses to which it may be applied in the economy of human life, might still have remained unknown, but for these southern voyages.

Notwithstanding what I have said about its propagation, when the fruit is ripe, I could wish you to examine it, and see if there is any thing like kernels or seeds, that you may likewise try if it can be raised from seeds. It thrives best on the same kind of soil as the jack, which is the red volcanic earth near the foot of the hills, and a higher level than to admit standing water in the monsoon.

*Fort St George,  
Jan. 29. 1792.*

I am, &c.

*From Robert Andrews esq. to Dr James Anderson*

DEAR SIR,

MR MEIN has before written you on our notion of having discovered the bread fruit tree ; he has sent you a leaf thereof, and this day sends you a drawing of a branch of the tree, with a representation of the fruit.

I now forward to you in a small box, a bud, which appears to shoot out like Indian corn, and you will observe the young fruit inclosed therein. I remain, &c.

*Tritchinopoly, Jan. 23. 1792.*

*From Dr James Anderson to Robert Andrews, esq.*

DEAR SIR,

I AM just favoured with your letter, and the bud of the bread fruit tree, with the fruit, which appears singular, as nature has been more careful of this, than of most

other trees, in defending every leaf, with two spathæ, or sheaths, in the manner that the flowers of some trees, the palms particularly, are defended, or like the Indian corn you mention.

Mr Mein's letters, and the first drawing, were just time enough to go this morning in the Deptford, to Sir Joseph Banks ; the second drawing of the fruit must wait some future opportunity.

I rely on your care, as well as his, to multiply the plants of this very valuable tree, (of which, we have only three at Madras,) for which purpose, I have written him directions by this tappal, which he will shew you. I am, &c.

Fort St. George. Jan 27. 1792.

*To be continued occasionally.*

#### TO CORRESPONDENTS.

THE obliging communication by Varietas is received, and shall be inserted with the first convenience. The ironical piecee be mentions, if executed with delicacy, will be highly acceptable. Sportive good humour is always sure to please.

The Editor returns best thanks to J. H. for his obliging communication, which he will endeavour to avail himself of as soon as convenience will permit. Will be glad to bear from this correspondent when convenient.

The reflections by A. are just, and well founded; but the Editor wishes to touch on that subject as seldom as possible at present, and hopes his obliging correspondent will accept of this apology for deferring it till a more convenient season.

The very humorous letter of Merlinspike is received, and shall be inserted with the first opportunity.

The obliging communication by Juvenis is come to hand, and shall be inserted when an engraving can be made. It may be proper to defer it a little, till we see what changes are produced by a little time. It will be obliging, if, with that view, Juvenis will be so kind as communicate what farther observations occur, with his first convenience.

The short criticisms by C. S. shall not be neglected.

The favour of Elvina is received. Did the Editor think himself qualified for the task she assigns him, he should with pleasure comply with her request. To oblige her, he will endeavour to find some other person to assist him in this respect.

Other notices deferred.

#### ERRATA.

\* \* \* The following errors remained uncorrected in a few copies of the last half sheet of the Number which immediately precedes this. Those, therefore, who have got these copies, will please correct them with a pen, as the sense especially by the first error, is materially affected.

Page 141, line 14, for eight read eighty.

— 148, line 5, for I read In an early number.

— ib. line 9 from the bottom, for nearly read early.

THE BEE,  
 OR  
 LITERARY WEEKLY INTELLIGENCER,  
 FOR  
 WEDNESDAY, OCTOBER 10 1792.

GRAMMATICAL DISQUISITIONS.

*Continued from p. 130.*

OF PECULIARITIES AFFECTING THE PRONOUN OF THE  
 THIRD PERSON ONLY.

*GENDER\*.*

*Singular number.*

ALL our grammarians remark, that, in English, the pronoun of the *third* person, in the *singular* number,

\* I have often had, in the course of these lucubrations, occasion to mention the word *gender*, yet from several letters I have received, it appears that what I have said on that head has not been sufficiently understood. My views were chiefly directed towards the information of those who were mere *English* readers. I find that some who are acquainted with *other languages* are equally at a loss to conceive clear notions on this head.

In all European languages, ancient and modern, the English alone excepted, the *gender* of nouns is a mere *artificial* arrangement, that has scarcely any dependance upon nature. In these cases the knowledge of the *gender* of nouns is a burden upon the memory only, in which judgement cannot be exerted; of course, in these languages, the number of genders is merely arbitrary. In some languages three, in others two genders only have been adopted; and as the *adjectives* in most of these languages, and the *articles*, where these occur, are made to vary according to the g . .

admits of a three fold distinction, respecting gender, and no more, *viz.*

1st, *Masculine*, expressive of males.

2d, *Feminine*, expressive of females. And

3d, *Neuter*, applicable to inanimate objects, or to animals whose sex is not obvious or generally known, or not necessary to be specified. Here the division rests. And although from what has been already said on the subject of *gender*, it is plain that this divi-

der of the nouns to which they refer, it becomes a severe task to learners to recollect these. This is a source of many grammatical blunders in the common use of these languages. But if it be embarrassing, even where only two genders have been admitted, how much more would it have been so, had all the possible variations been adopted that a strict adherence to nature would have required? It has probably been from this circumstance that so few genders have been in general employed: and, where this practice is adopted, perhaps the fewer of them the better.

In the English language no variation of either *adjectives* or *articles*, respecting gender, are admitted; and it is only in the *pronouns* that the gender of the noun, for which they are substituted, becomes apparent. This language too possesses the singular elegance of following nature precisely with regard to *gender*, as far as the number of genders we have adopted will permit. If a person therefore, knows the nature of the object of which he speaks or writes, he must also know the gender of the pronoun he must employ. If it be a male animal, the *masculine* gender of the pronoun only can be employed; if it be a female, the *feminine* alone can be used; if the sex of the animal be unknown, or if it be an inanimate object, the *neuter* gender must necessarily be adopted.

This rule is general, and admits of no exception; unless where, with a poetical enthusiasm, which the genius of our language readily admits, inanimate objects are personified; and in this case the poet who has once assigned sex to the object, must adhere to the same rule when he substitutes a pronoun for it.

In this respect then the English language is *unequalled*. It adheres to nature; but it does not extend its powers as far as the bounds of nature allows. The enquiry in the text is calculated to show how many distinctions in that respect *nature* would readily admit of.

sion is in complete; yet, perhaps, there is no language, ancient or modern, which is so chaste, or so nearly adheres to nature and common sense, in the use of gender, respecting pronouns, as the English; so that those who use it, are, in this respect, freed from an infinite number of embarrassments with which other languages in general are encumbered.

A very slight degree of attention, however, to the subject, will enable us to discover, that the divisions for gender we have admitted, are by far too few especially in respect to the pronoun of the *third* person, for effecting in a perfect manner the purposes of language.

Without repeating what has been said respecting the want of a pronoun denoting castrated animals, such as *eunuch*, *gelding*, *wedder-sheep*, *capon*, &c, I would here confine my observations chiefly to the *neuter* gender, which, in the English language, comprehends not only inanimate objects, which are all that should properly belong to it, but also animals that have no sex at all, those whose sex is not apparent, and others still in which, though the sex be known, it is not at all considered.

Many words are expressive of general classes of animals comprehending both sexes; such as *friend*, *servant*, *neighbour*, and so on, whose place cannot be supplied neither by the *masculine* nor the *feminine* pronoun as a substitute, far less the *neuter*. The *indefinite* gender\* is here so much wanted, that the

\* See p. g. 123, for the distinction respecting gender that affect the pronoun of the third person, in common with those of the first and second persons.

language becomes cramped beyond measure by this defect; and in every page instances occur, either of ambiguity, improprieties, and inelegancies because of this; or of circumlocutions, and forced turns of expression, that are necessary to avoid it. The phrase "*a true friend* is one of the greatest blessings in life," is natural, and the truth of the proposition is readily recognised. But should it be proposed to follow out the thought, by adding several particular instances of the blessings it bestows, we feel an embarrassment. And we must either repeat the word *friend*, or substitute an improper pronoun in its stead, thus—" *a true friend* is one of the greatest blessings in life: *a true friend* heightens all our joys: *a true friend* alleviates all our misfortunes, and soothes the mind to peace;" or, "*a true friend* is one of the greatest blessings in life; *he* heightens all our joys; *he* alleviates all our misfortunes, and soothes our mind to peace." But in this last case the proposition is not fairly rendered. The effect is confined to the *male*, which ought equally to include the *female*. The proposition which ought to have been general, is thus rendered partial only.

The pronoun *indefinite* is wanted also as the substitute of all such words as denote a whole genus of animals, without regard to age, sex, or condition. In a perfect language there would be at least three distinct words for each genus of animals: one to denote the whole, indefinitely, as *sheep*; another to denote males only, as *ram*; and the third to denote the female, as *ewe*. When thus employed, the word *sheep* would be supplied by the pronoun *indefinite*;

ram by the *masculine*, and *ewe* by the *feminine* pronoun. In this particular case we have another variation of the noun respecting gender, *viz.* *wedder* for a *castrated* male, but no particular pronoun for it.

It is true indeed, that few of our nouns admit of this triple distinction of gender; though, as we have often occasion to speak of a whole genus, we are on these occasions obliged to make use of such words as we have; forcing them from their particular meaning, to adopt one that is more general; as thus:

“The proper business of mankind is **MAN**.” . . . . Pope.

In which the word **MAN**, does not denote the *male*, as opposed to the *female*, but the whole genus. And the same thing is done with regard to the word **HORSE**, and many others, that are often forced to denote the whole genus instead of the male only, which is their proper meaning. On all these occasions, the ambiguity arising from the want of a proper term, expressive of the genus only, is greatly augmented by the want of the pronoun indefinite also. This pronoun is therefore very much wanted \*.

#### *Plural number.*

But though the pronoun of the third person be somewhat defective as to variations in the *singular* number, it is, in the English language, in this respect, greatly more complete than the *plural*, which admits of only the single word *they*, for all genders, instead of the *three* that are used in the singular.

\* I find by a late publication, that in Gloucester-shire, there is a provincial indefinite pronoun not adopted elsewhere; it is the word *ea*: *ea will*, means *any* . . . *will*, *he will*, or *it will*, (Marshall's Survey of Gloucestershire.)

This deficiency will appear the more extraordinary when we know that a much greater number of variations ought naturally to be admitted in the plural than in the singular number. Some languages we know do admit a triple distinction in the plural, as well as the singular; but these are still by far too few. The following are all obvious distinctions, that might plainly take place in reference to gender, with respect to the pronoun of the third person, plural number.

1 <sup>st</sup> , To denote male animals alone, which might constitute the	- - -	Gender, <i>Masculine.</i>
2 <sup>d</sup> , Female animals alone,	- - -	<i>Feminine.</i>
3 <sup>d</sup> , Inanimate objects alone,	- - -	<i>Neuter.</i>
4 <sup>th</sup> , Animate objects which either express general classes, or a whole genus, or where it is not necessary to specify sex at all,		<i>Indefinite.</i>
5 <sup>th</sup> , Animals known to be castrated, and meant to be distinguished as such,		<i>Imperfect, or Soprana.</i>
6 <sup>th</sup> , Males and females, known to be such, though not meant to be separated,		<i>Matrimonial.</i>
7 <sup>th</sup> , Males only, part perfect, and part castrated, known and meant to be distinguished; but not separated,		<i>Masculine Imperfect.</i>
8 <sup>th</sup> , Females and castrata,	- - -	<i>Fem. imperfect.</i>
9 <sup>th</sup> , Males, females, and castrata,	- - -	<i>Mixt imperfect.</i>
10 <sup>th</sup> , Males and inanimates conjoined,	-	<i>Masc. mixt.</i>
11 <sup>th</sup> , Females and inanimates conjoined,		<i>Fem. mixt.</i>
12 <sup>th</sup> , Males, females, and inanimates conjoined,		<i>United.</i>
13 <sup>th</sup> , Males, females, or inanimates, either separated or conjoined, where no distinction of gender was meant to be adverted to in any way. This is precisely the power of our present pronoun <i>they.</i>		<i>Universally indfinite.</i>

Some lesser distinctions are omitted to avoid the appearance of unnecessary refinement. The above are all obvious; and if a language should be found, the gender of whose nouns was only denoted by the pronouns, and in which a distinct and separate word was to be found for each of these variations,—and, were writers always at liberty either to employ the definite or the indefinite genders, as suited the purpose they had particularly in view at the time, this language would possess a variety of phraseology, and a clear, precise, nervous perspicuity of expression with which we are as yet entirely unacquainted.

*An unobserved case.*

Under the head of pronouns of the first and second persons, we had occasion to take notice of one important variation of the pronouns that had escaped the notice of all our grammarians. Another, that is of equal importance, and that has in like manner been hitherto entirely unobserved, occurs under the present head.

To avoid the appearance of egotism, and in some measure to vary the stile and form of narrative, an author often finds it would be convenient to write in the *third* person rather than the *first*, could it be done with the requisite clearness and perspicuity. But if the writer, in these circumstances, should chance to mention another person of the same sex with him or herself, (here I want the pronoun *indefinite*,) the frequent repetition of the same pronoun, as applied to the writer and to the party mentioned, occasions a perplexity and indistinctness, that can be in no other way avoided, but by repeating the noun itself, in place

of the pronoun. This confusion, however, might be entirely avoided, and the writer left in perfect freedom in this respect, if, instead of *one* pronoun only, for each of the genders, we had *two* or more. *One* of these words for each gender being invariably applied to denote the speaker only, another word to be as invariably appropriated to denote the party addressed, and a third or a fourth to be in the same manner appropriated to stand in place of the person *second* or *third* mentioned, in case that should ever occur. To exemplify at once the inconvenience here complained of, and the great facility with which it could be obviated, I shall beg leave to produce an imaginary case.

The following card will sufficiently prove the want of the variation here complained of with respect to the English language: and all other languages I know are equally deficient as to this particular.

“ Mr A, presents his compliments to Mr B, will  
“ be glad to have the pleasure of his company to din-  
“ ner, when *he* hopes *he* will be entertained by the  
“ singing of Signiora Martini, as *he* knows *he* is  
“ passionately fond of music; and it will always  
“ give *him* a very sensible pleasure to contribute to  
“ *his* amusement.”

This card, which could hardly be intelligible in its present form, on account of the frequent repetition of the same pronoun, as applied to different persons, would have been perfectly intelligible had we a different pronoun for the party *addressing*, and the party *addressed*. This we can easily prove by substituting a lady instead of a gentleman addressed; as

our pronoun for the masculine gender is a different word from that for the feminine: Thus,

“ Mr A presents his compliments to Mrs B,  
 “ will be glad to have the pleasure of *her* company  
 “ to dinner, when *he* hopes *she* will be entertained by  
 “ the singing of Signora Martini, as *he* knows *she* is  
 “ passionately fond of music; and it will always  
 “ give *him* a very sensible pleasure to contribute to  
 “ *her* amusement.”

Here no sort of ambiguity occurs; and it is plain that as little would be perceived in the former case, had we a different word for each of the parties when of the same gender.

But as it frequently happens that we have occasion to mention, not one person only, but several others, and to repeat circumstances relating to each, the confusion that in all such cases arises in the present imperfect state of our language, when this mode of writing is adopted, is such as to render it quite unintelligible. Nor could this perplexity be removed by adopting *one* variation only for each gender, but several others. This I shall endeavour to exemplify in the following imaginary card.

“ John presents compliments to James, begs <sup>2</sup> he will <sup>2</sup> *James*  
 “ be so kind as <sup>3</sup> call upon George \*, and bring him with <sup>3</sup> *George*

\* In this example the nouns John, James, and George, came in order *1st, 2d, 3d*. To mark the order, these figures are placed above the pronoun denoting them respectively, and below the line the name denoted by the pronouns written. The examples, it is hoped, will thus be intelligible.

“ him to morrow to dinner, where he will expect him  
 James John James

“ with some impatience, as he will be always proud to  
 James

“ show him every civility in his power, not only on his  
 George John's George's

“ own account, from the personal regard he bears him,  
 John George

“ but also on account of his father, who was his much  
 George's John's

“ respected friend.

“ If he will also desire him to come with an intention  
 James George

“ to spend the evening with him, it will give him an ad-  
 John John

“ ditional pleasure ; and in that case he will endeavour to  
 John

“ have some of his old friends to meet with him, whom he  
 George's George George

“ will probably be glad to see.

Should such a card as this be sent to any person, in the present state of our language, the adjuncts above and below the line being omitted, it would be justly laughed at, as a most absurd composition, that could not be easily decyphered. If, however, there was a particular pronoun appropriated to each of the persons mentioned in the card, the ambiguity would be totally removed, and it would be understood with as great facility as any other composition in our language. To illustrate this proposition, we shall, for a moment, suppose that the pronoun of

the *third* person, masculine gender, singular number, admitted of three distinct variations, *viz.* HE, with its present derivatives, for the first person mentioned; HEI, with its derivatives, for the second person mentioned; and HO, with its derivatives, for the third. These pronouns, with their derivatives, formed in the same way with our present pronouns, would stand thus,

For the first in order,      2d in order,    3d in order;

Nominative,	HE	pronounced	HEE	HEI	HO
Possessive,	HI'S			HEI'S	HO'S
Accusative,	HI M			HEIM	HOM

Which in this  
case would stand for } John and John's James and James's George and George's

By appropriating these words to their proper uses, the foregoing card would run thus,

<sup>1</sup> " John presents his compliments to James, begs that

"<sup>2</sup> HEI will be so kind as to call upon George, and bring  
James <sup>3</sup>

3 2 I  
" HOM with HEIM, to-morrow to dinner, when HE will ex-  
George James ~~WYKO MABBA M.~~ John

pect him with some impatience, as HE will be always  
George John

“ proud to show him, every civility in his power, not only  
George John

3 " on no's own account, from the personal regard he bears  
George's, & to do all in my power to help John

" him, but also on account of his father, who was his George George's John's

" If ~~HE~~ will also desire ~~HOM~~ to come with an intention  
James" and George

" to spend the evening with ~~HIM~~ it will give ~~HIM~~ an ad-

John ~~John~~

" ditional pleasure ; and in that case ~~HE~~ will endeavour to

John

" have some of ~~no~~'s old friends to meet with ~~HOM~~, whom

George's

" <sup>3</sup> ~~no~~ will probably be glad to see." <sup>3</sup>

George

The above card appears to read a little uncoouthly to us at present, because the words are new to us ; but there cannot be a doubt, that if these, or other words of the same import, were in use in language, their sounds would become familiar to the ear, and their meaning would be distinctly recognised at the first, as the words *he* and *her* are at present, or any other words in the language, and would be the source of much perspicuity and elegance.

*To be continued.*

## AN ESSAY ON WATER,

CONSIDERED AS A MOVING POWER ACTING UPON MACHINERY.

IN this essay it is not intended to engage in deep mathematical discussions, but merely to give some general notions concerning the most effectual way of applying water to machinery, in different circumstances, that as little as possible of its effect, as a moving power, may be lost ;—an investigation peculiarly proper at the present time, when machinery is beginning to be universally employed in manufactures ; especially as it will be found that a great part of the effect of that useful element, as a moving

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power, is now lost, from an inattention to obvious principles in the construction of machinery.

There are two cases which may be considered as the extremes in the application of water to turn machinery, *viz.* where the height of the fall that can be commanded, is very great; or where the water moves nearly on a level bottom, without admitting of a cascade or fall. If the means of applying water to machinery, in these two circumstances, so as to derive the greatest benefit possible from its power, be distinctly specified, it will be very easy to apply the principles that will thus be developed, to any intermediate cases that may occur.

Water, as a moving power, may be made to act upon machinery, either by its *dead weight*, or by its *impetus*.

When we speak of water acting by its *dead weight* upon a wheel, it is meant to say, that it is so applied as to produce an effect similar to that of a man pulling a rope wound round the circumference of that wheel, moveable upon its center; or that of any other kind of weight suspended from the same rope.

When it acts by its *impetus*, we mean the same thing as if a stone were thrown, so as to strike, with force, a bound fixed to the edge of a wheel, moveable upon its center. Such a stroke would make the board move; and by a repetition of these strokes, a continued rotatory motion may be produced.

Most of the water mills in Britain are so constructed as that water acts upon them in both these ways united; but wherever the fall is considerable,

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the general notion seems to prevail, that the greatest reliance ought to be placed on its power when acting by its *impetus*, and the effects that might result from its power as a *dead weight* are disregarded.

By an accurate set of experiments, conducted with great care by Mr Smeaton, the ingenious mechanician, and recorded in the Philosophical Transactions many years ago, this notion has been proved to be ill founded ; for he has demonstrated in the most satisfactory manner, that, *in all cases*, the same quantity of water will produce a much greater effect with the same height of fall, if made to act by its *dead weight* than by its *impetus*.

The difference of power when applied in these two ways, is always great ; but in some cases it is nearly infinite. Where the stream of water, for example, is small, and the height very great, the power of that water, if properly applied, by its *dead weight*, may be sufficient to overcome a greater resistance than any machinery could bear ; while, by its *impetus*, it could be *nothing* ; the whole body of water in that way being broken by the air, and dissipated.

In a wheel constructed upon the common principles adopted in this country, with float boards, or A A's, fixed on the circumference of the wheel, a great part of the *impetus* is lost by the motion of the wheel ; so that, on this account, the slower the wheel is made to move, the greater will the effect of the water be upon it.

A great part of the power of the water acting by its *dead weight* is, in this case also, lost by the water

being thrown from the A A's, in consequence of their inclined position, where lower than the axle, upon the edges of the trough in which the wheel moves: for as there must always be a vacant space between the edge of the A A's and that trough, as much water as fills that space, must, in all cases, escape, without acting upon the wheel at all *by its dead weight.*

The quantity of water that thus is entirely lost will always be in proportion to the distance between the trough and the wheel. It is therefore of the utmost consequence, if we wish to lose little power, that the trough be formed with the nicest accuracy, and be made to apply as close to the wheel as can be done, so as not to touch it.

The loss that is thus incurred will be greatest, where the velocity of the water is greatest, for a reason that shall be soon explained; therefore that loss will be always in proportion to the height of the fall, other circumstances being equal.

An opinion at present very generally prevails in this country, that a great deal of power is in all cases gained by increasing the breadth (I do not mean the diameter) of the wheel. In other words, by making the A A's of greater length than formerly. This opinion, however, is extremely erroneous; for where ever the fall is considerable, a diminution of power must be the result of this alteration; and where the wheel is constructed with plain A A's, this loss, where the fall is great, may be prodigious.

To explain this circumstance, it is only necessary to remark, that the depth of a stream which transmits the same quantity of water in a given time, its breadth continuing the same, diminishes in propor-

tion to the velocity with which the water moves; but when water is made to descend on an inclined plain, towards a mill wheel, its velocity increases every inch it moves forward, so as to be much greater at the bottom of the spout, where it reaches the wheel, than at the top of it; and consequently the depth of the sheet of water is much less where it reaches the wheel than it was at the top of the spout.

This being understood, let us now suppose, that in a trough of one foot diameter, and where the A A's are, by consequence, of the same length, such a stream can be commanded as to fill the trough at the top of the spout, so as to be on an average six inches deep; on a very moderate fall, that sheet of water where it reaches the wheel would not be four inches, (if tolerably great it would not be two inches.) Now if we suppose the interval between the A A's and the trough to be no more than half an inch, it would follow, that one eighth part of the *dead weight* of the water would be lost. If it were one inch, which is no uncommon case, the loss would amount to one fourth part of it.

If, with a view to improve this machinery, the trough should be widened, and the A A's lengthened to two feet, the consequences would plainly be these: the depth of the water at the top of the spout would now only be three inches instead of six, and of course the thickness of the sheet, where it reaches the wheel, would be only two inches, instead of four; but as there must still be half an inch of water lost, as before, it follows that one *fourth* part of the dead weight

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of the water must now be lost instead of one *eight*. Here then the loss is precisely double what it was before, without any advantage gained to counter-balance that;—augment that breadth to four feet, you once more double that *absolute* loss, (the *proportional* loss is much greater,) and so on, the more you encrease the breadth of your wheel, in these circumstances, the greater must the loss of power be; so that, instead of an improvement, this innovation is in fact a very considerable deterioration. Indeed it would be easy to show that in many cases the *whole* of the power of the water, as a *dead weight*, is thus entirely lost, so that it can act merely by its *impetus*.

Observe, what is here said respects wheels constructed with A A's; those with buckets, or receivers of any sort, will be considered below. But in most of these, as far at least as respects that part of the wheel below the axis, the case will not be found to differ much from what is here stated.

These observations may be sufficient to show that in all cases where a considerable fall of water can be commanded, there must ever be a great waste of that water as a moving power, when it is applied to wheels constructed with float boards or A A's, and to point out in what manner that waste may be augmented or diminished. In that mode of construction it is chiefly by its *impetus* that water acts upon machinery. It remains that we now consider the various modes of applying water to machinery so as to make it act by its *dead weight*; a mode of application that ought in every case to be adopted where the fall is considerable. As this branch of the subject has ne-

ver attracted the attention of mechanics so much as it deserves, and seems to be but little understood by the public at large, it will be of use to advert to it with care, which shall be done in a subsequent paper.

*To be continued.*

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*For the Bee.*

**COPY OF A SINGULAR LETTER FROM LIEUTENANT COLONEL CHARLES SKENE, GOVERNOR OF EDINBURGH CASTLE, TO THE EARL OF TWEEDDALE.**

MY LORD, *Edinburgh castle, Oct. 29. 1667.*  
I RECEIVED a letter this morning from my tutor John Kirkwood, wherein he tells me, your lordship was pleased to command him to let me know that you had seen a letter directed to the archbishop of Canterbury, which gives him an account of a rebellion that is to be in Scotland, and that the commander of the castle of Edinburgh was to declare himself for the rebels.—I shall not say much, but by G—d's wounds I shall be as honest and faithful in my trust as that bishop, or any other gownsman; and let him and them go to the the devil and bishop them: nor shall I ever counterfeit any letter that may be to my neighbour's hurt to keep myself great; for I am afraid it is their guilty consciences invents these and the like stories; and I hope whatever may be writ to them of me, the king my master will have charity for me; for G—d damn me that day I ever betray my trust to them or any else. O! my lord, forgive me; for I am almost mad; and in such a confusion that I know not what I am writing; but I am, and shall be, in spite of Toland, my lord, your lordship's most obedient servant,

(Signed)

CHARLES SKENE.

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POETRY.

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LOVE AND REPUTATION A FABLE.

ONCE on the way, as fable tells,  
Love, Reputation greeted;  
The first, like modern friends, seem'd frank,  
The other, shy, retreated.

“Sir Gravity,” said sprightly Love,  
“Shall I my schemes unravel?  
Companions fair! yet once for whim,  
“Together let us travel.

“Nor is this league, with empty views,  
“On either side invited;  
“Pert Slander, shall in vain essay,  
“On you, or me, united.”

Agreed!—away flies eager Love,  
His wings outstripp'd the wind,  
Whilst Reputation, slow of foot,  
Come lagging far behind.

Love stop'd, impatient at his stay,  
And cried, “if thus I tarry,  
“How many matches shall I spoil?  
“How many prudēs miscarry?

“How many vot'ries shall I lose?  
“Yet not my faith to sully,  
“I'll teach thee, my dear friend, though new,  
“To mark my progress duly.

“When towns I seek, a wing I'll plume,  
“Your guide to trace me thither,  
“At masquerades, assemblies, balls,  
“You ne'er shall miss a feather.”

“Soft! soft!” said Reputation, “child,  
“To these I rarely come;  
“So master Love, again you're free,  
“In random flight to roam.

“Yet e'er we part, weigh well my words,  
“With strict attention mind me;  
“Those whom I meet, and me direct,  
“Again shall never find me.”

## REVIEW.

THE POLITICAL PROGRESS OF BRITAIN; OR AN IMPARTIAL ACCOUNT OF THE PRINCIPAL ABUSES IN THE GOVERNMENT OF THIS COUNTRY, FROM THE REVOLUTION IN 1688. THE WHOLE TENDING TO PROVE THE RUINOUS CONSEQUENCES OF THE POPULAR SYSTEM OF WAR AND CONQUEST, PART FIRST. Edinburgh, Robertson and Berry, 1792. 15.

THE greatest part of this pamphlet as already appeared in the Bee, under the form of letters from *Timothy Thunderproof*, so that our readers are already in some measure able to judge of it. The author, in a short introduction, thus justly characterises the performance himself.

“ This pamphlet consists not of fluent declamation, but of curious, authenticated, and important facts, with a few short observations interspersed, which seemed necessary to explain them. The reader will meet with no mournful periods to the memory of *annual* or *triennial* parliaments; for while the members are men, such as their predecessors have almost always been, it is but of small concern whether they hold their places for life, or but for a single day. Some of our projectors are of opinion, that to shorten the duration of parliament would be an ample remedy for all our grievances. The advantages of a popular election have likewise been much extolled. Yet an acquaintance with Thucydides, or Plutarch, or Guicciardini, or Machiavel, may tend to calm the raptures of a republican apostle. The plan of universal suffrages has been loudly recommended by the duke of Richmond; and, on the 16th of May 1782, that nobleman, seconded by Mr Horne Tooke, and Mr Pitt, was sitting in a tavern, composing advertisements of reformation for the newspapers. MUTANTUR

TEMPORA! But had this plan been adopted, it is possible that we should, at this day, have looked back with regret on the humiliating, yet tranquil despotism of a Scotch, or a Cornish borough.

“ The style of this work is concise and plain ; and it is hoped that it will be found sufficiently respectful to all parties. The question to be decided is, are we to proceed with the war system ? Are we, in the progress of the nineteenth century, to embrace five thousand fresh taxes,—to squander a second five hundred millions sterling,—and to extirpate twenty millions of people ?”

The progress of human reason is but slow ; and when any one begins to combat prejudices that have long been cherished by a whole nation, many individuals are displeased to find, that the doctrines they have been accustomed from their infancy to think infallible, are treated with little respect. In this way, some readers will no doubt be displeased at meeting with the disagreeable truths which this pamphlet contains. Thus it was that many a well disposed Christian was shocked at the *blasphemous* heresies, as they were then called, of Wickliffe and of Luther : we now view them in another light. Thus it also was, that ten years ago, the first pamphlets that were written to prove that Britain would be a gainer by the loss of her American colonies, were considered as absurd and ridiculous paradoxes, though no person now disputes the unerring truth of these conclusions ; and thus it ever will be with the first efforts of reason towards eradicating prejudices of every sort.

No national prejudice is of longer standing, or has had a more extensive influence in Europe, than the war system, or requires to be combated with greater ardour ; because none has been productive of so much national mischief, or individual distress. National glory, the balance of power,

and the extension of trade, are the principal pleas that have ever been urged for going to war ; pleas that, if they are admitted, will be sufficient to perpetuate wars till there be scarcely an individual of the human race existing on the globe. Can national glory ever be augmented by acts of rapine, bloodshed, and injustice ? yet it is actions of this kind which have been cried up, as constituting national glory, from the days of Cyrus to those of George III. The balance of power ! what is it but a bubble to amuse the multitude,—a pretext for exalting the favourite nation of the day, which we must pull down the next ? Within this century Britain has expended her blood and treasure successively to exalt and to abase almost every power in Europe ; and so it ever must be, while this Quixote doctrine prevails. Heaven alone can set bounds to the power of empires, which cannot be overcome ; and nothing else ever will do it effectually, till mankind shall be endowed with a greater degree of foreknowledge, honesty, and steadiness, than they ever yet have possessed. As to wars for the extension of trade, of all the absurdities that ever marked the ravings of the human mind, that is doubtless the most remarkable :—it amounts to this,—to make other nations purchase your goods to a greater extent you must enhance the price of these goods ;—to make a customer buy them in greater quantities, you must render those purchasers poorer than they otherwise would have been. The public are indeed amused by a grand display of treaties and restraints, by which this trade is to be forced, by iniquitous stipulations, to run in their favours : as if every man of common sense did not know, that it would be equally wise to attempt to make the sea flow upwards on the side of a hill, as to continue in any nation a brisk demand for goods that are dearer or worse in quality than those of neighbouring countries.

War can serve no other good purpose therefore but to augment the power of the minister, by furnishing individuals with the means of suddenly enriching themselves by plunder, at the expence of the community at large. It is the hope of this plunder that makes so many voices join in the favourite cry of national glory,—balance of power,—and benefits of trade. It is the hopes of profiting by their aid, in gulling the people at large, that the minister so cordially ever leads the van in this general cry. Shall man ever continue a child, and allow himself to be led to destruction in leading strings?

The writer of the pamphlet before us, has here lent his aid to throw into disrepute the system of war. There still remains a wide field for discussion with regard to other doctrines, that have been cherished for ages from the same motives, to which he has not extended his views. These, it is hoped, will come successively to be examined, by persons who have the national good at heart; and who have no connection with party; no prejudice at individual men; no hopes of being benefitted by the plunder either of enemies or of friends: for when once plunder becomes the object, the experience of ages clearly proves, that men have ever showed themselves as eager to obtain it from their neighbours as from strangers,—from their friends as from their foes.

Many of the readers of the Bee have imagined that Mr Thunderproof is inimical to the present minister; but this opinion does not appear to be well founded. One of the national prejudices that ever has, and probably ever will prevail, is, that the present minister, whoever he be, ought to be deemed in some measure sacred; and that every person who does not speak and write in that manner, must be ranked among those who have set themselves in opposition to him, and who, right or wrong, will oppose every

measure that he shall adopt. There can be no doubt that every minister will endeavour to cherish this opinion, because it tends to screen his conduct for the present from an impartial investigation. It much imports the welfare of the state that this prejudice should be removed, and the writer deserves well of the community for having endeavoured to weaken it. Of any individual we wish not to speak; but there can be no doubt but every minister, *ex officio*, lies under very strong temptations to impose upon the people, and to lead the nation into undertakings that have a necessary tendency to diminish its general prosperity. His conduct therefore should be at all times nicely watched. And though he should be cordially supported, wherever it is necessary to give the *executive* department its fullest energy; yet in every attempt to extend his power beyond proper limits, in *his legislative* capacity, he should be checked with a becoming firmness. The distinction here made has been hitherto but too little attended to by political writers. A circumstance, which, for not having been *at all* adverted to in a neighbouring nation, has produced a scene of confusion, and multiplied atrocities, that makes the human mind shudder with horror. From not attending to this circumstance, also, many writings that perhaps were as well intended as any that ever issued from the press, may become extremely pernicious; and numbers of men, whose hearts glow with philanthropy, feel themselves at this moment disposed to lend their aid in forwarding measures, which, if adopted, would prove in the highest degree destructive to the community and ruinous to individuals. A little time, and a more perfect knowledge of the essentials that constitute the true principles of a rational freedom in government, will probably tend to moderate these incautious *wanderings*.

A circumstance is mentioned in the above quotation that deserves to be attended to at present. The most perfect security of person and property constitutes the very essence of civil liberty ; and could that be insured by an universal liberty of suffrage for representatives, every man ought to promote such a measure ; but if experience shows that this circumstance alone has never been sufficient to insure any thing like that security, it must be deemed a matter of very little moment at least. If it has proved destructive, it ought to be avoided. It would be well if gentlemen who are zealous in this cause, would consult the authorities there quoted, and satisfy themselves upon this head, before they place their whole reliance on a circumstance, which may, perhaps, instead of a prop on which they can safely lean, turn out to be a spear that shall pierce them to the heart.

The following curious fact respecting this circumstance deserves to be noted. The whole male inhabitants of the canton of Bale in Switzerland, on the first institution of that republic, had a right of voting for their rulers : but experience soon taught them, that this universal privilege of voting, was by no means sufficient to guard against the influence of wealth and popular manners. Still more effectually to do this, the mode of election was varied. Every man continued to retain the right of suffrage, as before ; but instead of *one*, every vote included *three* persons, one of which was to be chosen *by lot*. Still, however, influence was found to have great sway in the elections, and it was deemed necessary, on this account, once more to change it. Instead of *three*, every vote was made to include *six* persons, one of whom only can be chosen, and that must be done *by lot*. In this state things remain at present. It requires not much foresight to see, that for the same reason as formerly, they will find it necef-

sary once more to alter their mode of election; for the influence of wealth and popular manners, can never be fully excluded, until the election shall be made entirely by lot. I cannot help recommending this proposition to the attentive consideration of those who wish to preserve the public tranquillity, and at the same time to exclude influence entirely from the elections in Britain. Were the qualifications necessary for candidates properly defined, and the law in that respect duly enforced\*, I can see no objection.

\* If, for example, we wished totally to exclude every kind of influence at elections, I should be glad to know what objections could be made to the following regulations, *viz.* let a law be made which ordains,

1. That no person can be elected till he has attained the age of 25 years complete. And,

2. That no person who has ever lived for ten years at a time out of Britain, or at least out of Europe, can ever be eligible. And

3. Who has had his principal residence in the county where he becomes a candidate, for three years at least, preceding the day of election. And,

4. Who possesses in his own right in landed property, the value of three hundred pounds of real rents, at least, free of deductions, or enjoys an income, if in business, at least of five hundred pounds a-year.

All these facts to be ascertained by a jury of honest men in the vicinage, who shall take cognisance of them at the assizes immediately preceding the election, and whose verdict must be produced to the returning officer before the candidate can be put upon the ballot.

Thus every scrutiny and expensive investigation into the legality of claimants would be avoided, and the necessity of delays precluded.

Let as many candidates, thus qualified, as pleased, come forward at the time of election. Let one who had been a candidate at some former period, but not at present, be chosen from among those present by lot, as the returning officer. Let a number of small rods, of unequal lengths, but in every other respect, the same be provided, in number the same as that of the candidates; and another equal number of rods, having the name of one of the candidates written upon each. Let all the rods of one sort be shaken and mixed carelessly together before the meeting, and then so placed that one of the ends may project a little beyond a cover, and all ranged equal, the writing on the one set being entirely concealed. Let a man then be provided, who, by an inquest before a jury, shall have been previ-

tion to this mode of election but one, *viz.* that it would but too perfectly effect the purpose proposed. Such a regulation would set the court and the opposition alike

ously found to be perfectly blind. Let this man draw first a blank rod from one side, the length of which shall be ascertained by measuring it on a rod, within view of the meeting, and the precise length of it called out with an audible voice by the returning officer, and marked by the clerk. Let then another rod be drawn from the opposite side, with the name of the candidate upon it, which shall also be held up in the sight of all present, so as to be legible to them; after which the name shall be publicly announced by the returning officer to the clerk, who shall mark it opposite to the measure of the rod before announced; and so on, till the whole are finished. The clerk shall then read over the whole deliberately, and with an audible voice, making a pause before every name. This shall then be presented to the returning officer, who shall declare which of the candidates has obtained the longest or the shortest rod, (as had been previously agreed,) and who is of course to be the member for this time, then signing the paper with the return upon it, send it to the person authorised to receive the same. And thus ends the election.

If those who plead for a reform at present, are seriously desirous of obtaining the object they profess, a representation totally unbiased by the power of the crown, or any other influence, they cannot object to this proposal; and in that case the great objection to frequent elections, *viz.* the loss of labour, and the disturbances which then occur, would be entirely done away, so that even annual parliaments, if thought proper, might be adopted. I do not pretend to say whether this would be the best mode of elections possible; all that is contended for, is, that the influence now so loudly complained of, would be effectually avoided; so that if the reformers reject it they must clearly abandon their principle, which will prove that some other object is in view than that which is held out to the public.

It is unnecessary to observe, that, on this plan, a certain number of the confidential servants of the crown, to be distinctly specified in the bill, shall be members of parliament, *ex officio*; for national business could never be carried on without them: no objection can arise from this circumstance, because these would be necessarily confined to such a small proportion of the assembly that their number could have little effect in determining a majority. For the reasons assigned in the text, no person will believe that I could seriously expect that this regulation will ever be adopted in Britain.

at defiance. It would equally frustrate the views of whigs and of tories,—of aristocrates and democrates,—it would diminish the emoluments of lawyers, and disappoint the rapacity of voters. Who then is to support such a proposal? All the active interested turbulent spirits of the nation would cordially unite to execrate it. It could be relished only by quiet, peaceable, honest men; but such men choose to remain in the bosom of their own families, enjoying the blessings of tranquillity, while all the others are up in arms against it.

Our author in the course of his work makes some quotations from Dodington's diary, a book too little known; for of all the publications that ever issued from the press in Britain, this one contains the fullest developement of the farce of government. In that work are produced many authentic proofs of the most popular ministers recommending in parliament the dissipating of national wealth, under pretexts that they knew to be false, and opposition even concurring in these measures, knowing them to be false, rather than run the risk of disobliging certain persons. The same thing has occurred during the political life of persons now on the stage. Yet as long as ministers shall have places and money to bestow, they will continue to be idolized by their party; and as long as others expect to get into place, they will take care not to touch upon certain topics that they think too tender to be publicly investigated by them.

Let us not deceive ourselves. In the political world, the love of plunder is the universal passion. Its influence is there as universal, as that of gravitation in the physical world. It is this which, like affinities in chemistry, is the cause of all those wonderful *combinations* and *separations*, which keep the universe in a perpetual state of hostilities and ferment; it is this all powerful agent which sets reason at defiance, and overturns in a moment her sovereign decrees. By its irresistible influence,

we see Britain founding fresh colonies, at the very moment that reason, supported by the most decisive experience, has convinced every thinking person in the nation that we made a most valuable acquisition, when we lost our American colonies. By its influence we see the British arms employed to extend our empire, as we vainly call it, in the east, at the very time that we are professedly execrating war and conquest. When economy is the favourite topic of the day, we are lavishing our treasures in enterprises, from year to year, that can have no other tendency but to generate fresh wars, and accumulated expences to an indefinite extent. All these things the love of plunder can perform ; it can do more,—it can cause the most extensive monopoly in trade that ever existed, be cherished in the heart of a nation which boasts of its freedom, and execrates monopolies in trade. Under the influence of this all powerful agent, prosecutions against delinquents are commenced ; by its influence also they are suspended ; individuals are allowed to raise the price of articles, of universal consumption, almost to what height they please, by a careful exclusion of all others from coming into a fair competition with them.—We should never have done, were we to enumerate the hundredth part of the things that can be effected by this domineering and irresistible agent, that has so long extended its ravages in the world.

The writer of the pamphlet under consideration, has traced, with a bold outline, some of its effects *in the higher* departments of society ; but he has in a great measure lost sight of it among the *lower orders* of people, where its influence is as extensive, and where it rages with as unlimited sway, as among their superiors. He proves, that some princes are extravagant, ministers prodigal, and parliaments venal ; from all which many will probably

infer, that princes are pernicious, ministers destructive, and parliaments usefess. But unless it could be proved, that the electors are less venal than the elected ; that the lower orders of people are less corrupted than the higher ; that the illiterate have more knowledge than the learned ; and that personal property will be more anxiously preserved inviolate by those who have little to lose, than by those who have much at stake, we shall be obliged to admit that, notwithstanding all the weakness, extravagance, and follies of the higher ranks, it is by no means clear that we should be gainers by transferring power from their hands into the hands of others, who would in all human probability be weaker, more extravagant, foolish, and wicked than the others. Indeed the experience of all past times fully proves, that, among a people whose morals are already lax, whose manners are corrupted by luxury, and whose conduct is not influenced by the ties of religion, the people would not *probably*, but *certainly*, be more corrupted and base than their superiors. Witness the shocking scenes at present acting in France, which it is impossible to mention without horror. Scenes which, for atrocity, have no parallel in history ; but which, in *kind*, more nearly resemble the transactions of the Roman Praetorian bands than any other. To give power to such persons, is to kindle a fire that consumes, and which can only be extinguished by the destruction of the whole mass.

While we remain in this world, evils must subsist ; and under every arrangement of things, wickedness must still abound. If therefore we were to reject every government that is imperfect, we would annihilate the whole ; and every man would, of course, pillage, rob, or murder at pleasure, another who was weaker than himself. That government is surely the most perfect, which is so con-

stituted as to be able to protect individuals, and preserve good order, even where vices and errors subsist among both the governing, and the governed. An institution which necessarily supposes that *virtue* must undoubtedly prevail among the one or the other, is by no means calculated for man in an advanced stage of civil society, nor can such a form of government any where subsist, for a continuance of time. Our business, therefore, ought to be, never to hope to extirpate vice,—to eradicate error,—nor to be able to lop away every species of corruption; but to correct errors in the best way we can, wherever we discover them,—to lessen the influence of vice, and to moderate the effects of corruption. Had the writer of these essays bestowed as much attention on the influence that the corruption and vices of the lower ranks of the community produce, or would produce, if unrestrained, as he has done with regard to those of the higher orders; and had he with a patient discrimination suggested the means by which the one and the other might have been effectually moderated, he would have conferred an essential benefit on mankind. As he has omitted to do this, the essays can have no other good tendency, but to rouse the attention of the reader to a few objects that surely highly deserve his notice. These things should have been done, and the others not left undone. It is extremely doubtful however, if much good can result from this kind of *partial* investigation. To a mind warmed by philanthropy, and illuminated by knowledge, it would seem that an effectual cure should be ready prescribed before the wound is probed; otherwise, it is like opening a sluice, before a channel has been prepared to receive the superabundant water. In that case it must occasion infinite havoc before it can work out a natural channel for itself. But it is an easy matter to point out errors; it requires talents of a very different kind to com-

prehend the means of correcting these. Thinking superficially, and writing boldly, is all that is necessary for *the one*; a mind capable of the most vigorous stretch of comprehension is required for *the other*: a pamphlet may suffice for the one; but for the other, a work of great extent, and profound investigation, would be required. Need I add, that the first would have many readers, who would think they understood, and therefore who liked it; the last would find few who would read it, and fewer still who could comprehend it.

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#### NOTICE OF BILLINGS'S DISCOVERIES IN THE NORTHERN ARCHIPELAGO.

OUR readers are already informed of the general progress made by captain Billings, Bee vol. ix. p. 61. That enterprising navigator, in the course of his voyages among the northern Archipelago, picked up a great many animals, plants, and articles of dress of the natives, which he sent in several boxes to the empress. Mr Palias had not had leisure at the time our information left Russia, to examine the animals; but he had distinguished among the plants, several new kinds of *sophoro*, *croton*, *gnaphalium*, *andromeda*, *potentilla*, *artemisia*, and *rhododendron* ;—a black lily, whose roots are tuberculous, and serve as food to the natives;—a new perennial *gramina*, whose stalk is very large, and contains a great quantity of grain proper for the nourishment of man;—several *legumina*, likewise fit for food,—a kind of fir,—a species of *sorbus*,—and a dwarf willow. These trees, which do not rise above three feet high, are the only ones which grow in the isles *Kourites* and *Al'contes*, where they found the Alpine plants of Kamschatka and Siberia. It is much to be regretted, that captain Billings could not send seeds of these plants, as he visited these islands, before they had attained maturity.

*Notes to correspondents deferred.*



MISCELLANEOUS PLATE, FOR THE BEE.

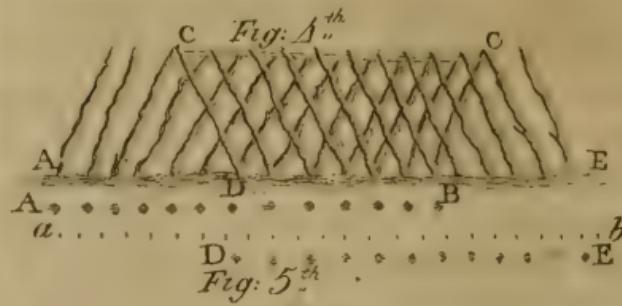
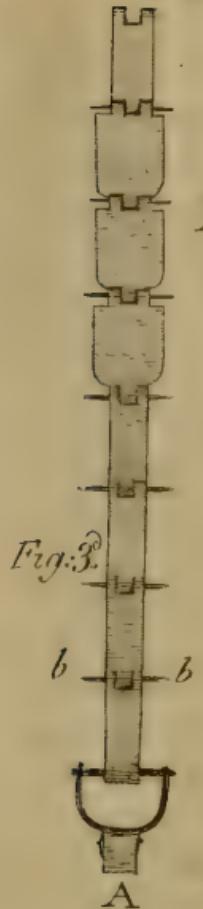


Fig: 4<sup>th</sup>

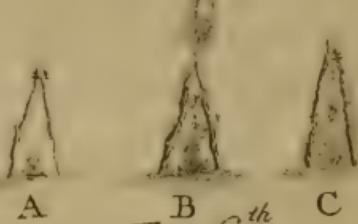


Fig: 5<sup>th</sup>

Fig: 3



Fig: 6<sup>th</sup>



Fig: 7<sup>th</sup>

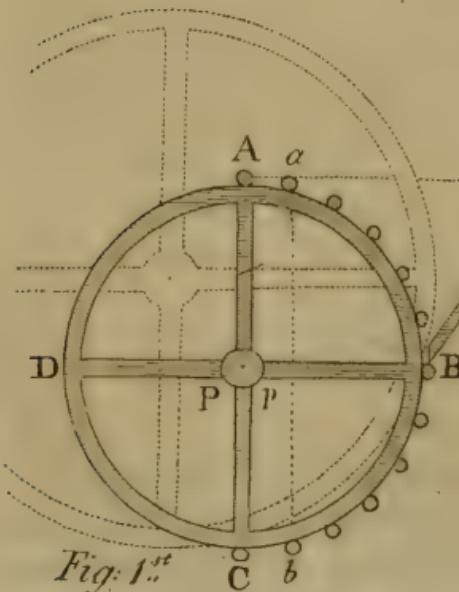


Fig: 1<sup>st</sup>

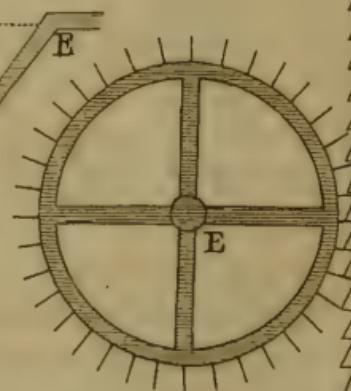


Fig: 2

THE BEE,  
OR  
LITERARY WEEKLY INTELLIGENCER,  
FOR  
WEDNESDAY, OCTOBER 17. 1792.

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CONCERNING THE INFLUENCE OF TASTE  
ON THE HAPPINESS AND GLORY OF NATIONS.

*Concluded from p. 161.*

HAVING considered how taste promotes the happiness of individuals, of families, and of society, I am to conclude the whole of my discourse concerning this important subject, by pointing out the effects of its influence upon the prosperity and happiness of the public at large.

Taste, (says the excellent Montesquieu,) in the most general definition of it, without considering whether good or bad, just or not just, is “*that which attaches us to a thing by sentiment.*”\* In the former part of this slight essay I have endeavoured to show how the principles of taste are evolved in the pursuits and habits of those who have been fortunately emancipated from the grovelling desire of sensual pleasure, and how it operates in the infinite extent of rational curiosity, where one clear idea leads

\* Montesquieu on taste, a fragment. See Dodsley’s annual register, volume i. p. 311.

to the pursuit of another, in a chain whose beginning is no where, and whose links are every where, after the nature of that infinite and perfect Being in whom we live, and move, and have our existence, and whom we can only resemble when we raise ourselves above the range of brutal enjoyment.

*2dly*, In the pleasure derived from the contemplation of order; and of order amid variety. *3dly*, In the pleasure arising from symmetry or of fitness and utility. *4thly*, In the pleasure that arises from contrast. *5thly*, From surprise, terminating in a scientific acquaintance with the cause from whence it arose. *6thly*, In delicacy of sensation which enables us to feast on the graces that are evanescent or impalpable to the eye and apprehension of the sensualist. And finally, in the complete establishment of the habit of intellectual desire uncontrouled by vulgar appetite, or enervated by idleness and sloth.

Now, it is evident, that as a nation, or what we call, in the most extensive acceptation of the word, the public, is no more than the aggregate of individuals, families, and communities, so whatever can render the parts more perfect, must tend to the perfection and happiness of the whole.

But the subject is so delightful and important, that I shall be easily forgiven when I shall have traced the more immediate effects that must be produced upon the active powers of government, and upon a people at large, by the dissemination of that taste which is the subject of my present discourse.

It was undoubtedly to the dissemination of taste

among the richer and higher ranks of men in Greece and Italy, that mankind were indebted for any relaxation of that shocking and barbarous disparity which took place among their feudal and military institutions, where the prince and the soldier were every thing, and the people nothing.

It was to the same existing causes, increased by the intervention of the printing press and the engraver, that France, under a similar government, from the reign of Henry II. to the death of Lewis XIV. enjoyed the small degree of happiness that fell to its share, during those times of trouble, or of monarchical vanity and ambition; and to the same causes France and the world is indebted for the pre-eminence that good sense has obtained over the enslaving maxims of an all-grasping church or turbulent nobility.

By this very taste, or power, or sentiment, operating extensively through the channels of literature, mankind are now satisfied that the happiness of the people ought to be the supreme law, and the rule of all government, as well as its final object in its administration.

I know very well that the extensive dissemination of taste and sentiment among the lower ranks of men, is scouted by the great and opulent; and by a monstrous delusion is not approved of by some, who, in the odour of diabolical antiquarianism, adore the rust of chains that are ancient, and are careless of those things that are of universal utility, and general concern, and competent to all men.

But a light has begun now to shine out of darkness, which, though it makes the eyes of the darkling to

blink, and seems like a bright and airy meteor that is destined to perish, will, in the end, be chosen rather than darkness, if our deeds are not evil, and will shine more and more towards the perfect day of political perfection.

It is for this reason that I prefer the communication of scientific, moral, and political knowledge, in a pamphlet or a magazine, to fifty volumes in folio of the fathers, or of the commentary of Aristotle ; and that I have thought my time well bestowed in conveying to the people at large, through the channel of this miscellany, the imperfect essay of its well-wisher and reader.

A. B. \*

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ACCOUNT OF THE SOCIETY OF ARCADIA,  
BY ABBE TOURNER.

*Concluded from p. 88.*

THE Parrhasian grove, (*il Bosco Parrasio*) where the Arcadians assemble in summer to repeat their compositions, was first in a small forest belonging to the convent of *St Pietro in Montorio*; from this the denomination was transferred to a place in the villa of the duke of *Pagænica* at *St Pietro in Vincoli*, where the shepherds had no other place to sit upon but the grafts. Until this time no body was admitted except the Arcadians; but their fame attracted many who requested to attend as auditors, and in a short time no

\* The Editor is much indebted to this obliging correspondent for these ingenious essays, though he cannot help thinking they would have been more generally relished, had the illustrations had less tendency to political affairs. On this subject men's opinions will always differ; and consequently arguments, though just, when thus illustrated, lose of their effect. It is for future correspondents this hint is intended.

person was denied admission. They obliged the Arcadians to assemble in a larger place which was in the gardens of duke *Riario*, at present belonging to the *Corsini* family, which the queen of Sweden had formerly possessed. In the year 1693, the duke of Parma built a theatre for them on mount Palatine; but the duke's minister at the court of Rome having taken some umbrage at an eclogue repeated by two Arcadians, the general assembly, in order to avoid all disagreeable encounters, prudently found means to remove from the *Orti Palatini*, without giving offence to the duke. This happened in 1699, and *Iliso* (duke Antonio Salviati,) invited the Arcadians to his gardens at the *Lungara*. His death in 1704, obliged them to perform in the following year the Olympic games in honour of the deceased Arcadians, in the gardens of *Eutimene*, (prince Vincenzo Giustiniani,) out of the *Flaminian* gate. In 1707, they were received by *Olinto*, (prince Francis Ruspoli,) in his gardens on the *Esquilin*. Five years after, the same *Olinto* caused a magnificent theatre to be prepared, of three orders of seats, and a statue of Apollo at one end, in another garden of his, on the *Aventin*. At length when king John v. of Portugal was acclamated an Arcadian shepherd, under the name of *Arete Mellèo*, assigning to him the *Mellean* lands, which had been in possession of the deceased *Alnano*, (pope Clement xi.) he made a present to the *Arcadia* of four thousand crowns, with which a piece of ground was bought on the declivity of the *Gianiculum*, in the year 1726; since which time this society

have enjoyed it, and have, in the summer time, their public and private meetings. The form is of a small simple amphitheatre, with three rows of stone seats, surrounded with fine luxuriant laurel trees; the walls that enclose the amphitheatre are decorated with marble inscriptions to the memory of the deceased Arcadians, who either had, by an universal renown, added particular lustre to the society of Arcadia, or had bestowed upon it some extraordinary favour.

The first that had this honour decreed to him, seven years after the institution of Arcadia, was *Amicio* (Dr Francesco Redi,) well known as a profound philosopher, and an elegant poet. To obtain such a degree, one of the Arcadians presents a request for making an inscription to the memory of any one he thinks deserving of such a distinction. The custode then gives the commission to some fit person of the society to write his life, which is submitted to the inspection of three other Arcadians, in order to examine whether, from it, there results the universal fame required, after which they give their opinion in writing, and the person who makes the request, is at the expence of the stone, as well as of the portrait in copperplate, which, with a copy of the inscription, is prefixed to the life that is printed when there is a sufficient number to make a volume. There are already five volumes in 4to of them, and materials ready for a sixth\*.

\* As a specimen of the true, neat simplicity of the laudatory stile, I have chosen four of the inscriptions, out of the many that exist. The first is to the memory of *Vincenzo Leonio*; the second of *pope Clement xii*; the third of *Vincenzo Viviani*, the last scholar of *Galileo*; and the fourth of the *Marchesa Petronilla Massini*, an elegant poetess.

*La Capanna del Serbatojo* is the name that the founders of this pastoral society gave to the place,

## I.

## C. V. C.

Uranio Tegæo, P. A. xiiii.  
Viro Institutorum Arcadizæ  
Italicæque Poeseos  
Romæ Restitutorum Principi

Cœtus Arcadum P.

Ol. DCXXIV. ann. iii. ab A. I. Ol. VIII. ann. ii.

## II.

## C. V. C.

Alnæo Melleo Arcadi  
Accl.

Pastorum Maximo

Coetus Arcadum P.

Ol. DCXXV. ann. i. ab A. I. Ol. VIII. ann. iii.

Cum Ludi Agerentur.

## III.

## C. V. C.

Heroni Geonio P. A. Df.

Mathematico Arnaurus

Epirus P. A. XII. Vr. Coll.

Arc. S. Ld. F. C.

Ol. DCXXI. ann. i. ab A. I. Ol. IV. ann. iii. C. L. A.

## IV.

## C. V. C.

Fidalmæ Parthenidi N. A.

Poetriæ

Bandalius Phezzæus P. A.

Mulieri Claris, P.

Ol. DCXXVI. ann. ii. ab A. I. Ol. X. ann. i.

After a revolution of three or four thousand years, in which time Europe may have been buried long in the darkness of ignorance, and all monuments of learning destroyed, if these inscriptions shall happen to be dug up again, what excellent food for the conjectural imaginations of antiquarians!

where are preserved the compositions, either in prose or in verse, which have been repeated in the Parrhasian grove, besides letters of Arcadians, relating either Arcadic or literary business; and other authentic papers belonging to the society, the original catalogue of the Arcadians, the emblems of all the colonies, the narration of all the deeds of Arcadia, (*Fasti Arcadici*) the seals, and the portraits of many Arcadians, as it is permitted to every one to send his own. The situation of the *Serbatojo* has always been, until now, in the lodgings of the *custode*. It may be not only looked upon as the register office of *Arcadia*; but likewise as its secretary office; for all the diplomas are dated from the *Capanna del Serbatojo*. In the time that the Parrhasian grove is not kept open, from the 7th October, to the 1st May, the Arcadians assemble in the *Serbatojo*, to transact their business, and repeat their compositions. In the guardianship of *Fiacida Inciniano*, (Abate Lorenzini,) for some reasons of his, the Parrhasian grove was not opened for many years, and then the custom took place to have private assemblies every Thursday in the *Serbatojo*, which are now continued, beside the public ones. But *Lorenzini* to make amends for this silence, erected a little theatre near the *Serbatojo*, where he caused the comedies of *Plautus* and of *Terentius* to be acted by several young gentlemen, who performed to such perfection, and with all the decorations in character, that not only all the literati, the nobility, foreign ambassadors, and cardinals, frequented this new show; but pope Clement XII, *Corsini*, sent several times to Lorenzini large sums of money, in

order to enable him to have the Latin comedies represented with the necessary decorum. The theatre got the name of *Sala Latina*; and the cardinals *Gentili* and *Corsini* were declared protectors of it.

The public assemblies for the rehearsal of compositions in the *Serbatojo*, are no less frequented than at the *Bosco Parrasio*; but it is extraordinarily so when it is known that there is *l'improvviso* or singing poetry, *extempore*, a prerogative which I believe is peculiar to Italy. Sometimes the poets will challenge one another in rhyme, and find out reciprocally a subject; at other times any of the company is invited to give a subject, which, if there be two or three *improvvisor*, is generally of the problematic kind, that each may choose an opinion, and thus form an agreeable contention. Two or three different subjects have been given by different persons at the same time to *Abate Serio*, a Neapolitan; he makes one of them the principal subject, and introduces the others as episodes; and thus goes on for an hour or two singing poetry *extempore*. Among the old Arcadians were famous for *improvvisare*, *Tirsi*, the (*Avvocato Zappi*,) *Benaco*, (*Cononico Grazzini*,) *Fedreo*, (*Giuseppe Vaccari*,) *Eulibio*, (*Paolo Rolli*,) *Fausto*, (*Paolo Vannini*,) *Eniso*, (*Domenico Ottavio Petrosellini*,) *Artino*, (*Pietro Metastasio*,) from his younger years, and *Alauro*, (*Cavalier Perfetti*,) who at the request of the princess *Violante* of Bavaria, dowager of Tuscany, then in Rome, got the laurel crown in the Capitol; which coronation was very much opposed, as it was al-

leged that the laurel crown was at all times reserved only for epic poetry, as indeed all those who had been crowned in the Capitol before him had been so on account of their epic poems, exclusive of their other poetical performances. In the latter times we have had *Acromelo*, (*Agostino Germisoni*,) *Euridalco*, (*Abate Golt*,) *Aurasio*, (*Abate Versari*,) *Enisildo*, (*Abate Giuseppe Petrosellini* \*,) *Abate Rocchetti*, *Abate Berardi*, *Abate Casali*, *Giacomo Diolle*, and *Giuseppe Giordani*, who have displayed in *Arcadia* their talents in singing poetry *extempore*; the two last particularly excelled in the jocose style. Two ladies, likewise, Arcadian nymphs, have made the *Serbatojo* resound with their elegant *improviso*: *Efiria Corilea*, (*Signora Anna Parisotti Beati*,) and *Corilla Olimpica*, (*Signora Madalena Morelli Fernandez*.) The latter was likewise crowned in the Capitol; but she was rather sacrificed, by the foolish manner the business was brought about by her protectors, who were besides nowise acceptable to the public; so that it had more the appearance of a mock coronation, than any thing else. I cannot take leave of this subject without making particular mention of another Arcadian nymph, although she has never been at Rome, and who is the admiration, not only of her own countrymen, but of all foreigners of learning and taste who have the opportunity of conversing with her, on account of her profound knowledge, united to extreme modesty, and of the most pleasing entertainment they enjoy from her readiness in the *improviso*, wherein the most deep science is elegantly set off by the most chaste beauties

\* Some of the Arcadian names have escaped my memory.

of true poetry; I mean *Temira Parraside*, (*Signora Fortunata Sulcker Fantastici*,) in Florence. In the same town I have had the pleasure to be intimately acquainted with *Dr Giannetti*, who, to application to the severest studies, has added the amenities of the fine arts. The astonishing rapidity with which he speaks his *extempore* poetical performances makes up for his want of voice, which hinders him to sing at the sound of the luthe, as is commonly in use with the *improvvisorì*, though *Corilla* used to sing her poetry at the sound of the violin, especially where she could meet with *Nardini*. Nor is this ready disposition to *extempore* poetry peculiar to people of education; that natural keenness of sense for harmony, numbers, and metre, which may be reckoned one of the first things requisite to form a poet, is not rare in Italy, even among the country lads and girls, chiefly in the environs of Rome and Florence, who, not knowing even to read, and totally ignorant of metrical laws, will sing verses *all' improvviso* upon any given subject, suited to their capacity, with the only guide of their ear, without ever transgressing the accents or the measure; though many learned people, and well acquainted with the laws of versification, would find it very difficult to execute, without counting the syllables on their singers. It is pleasant in Rome, in the summer nights, to follow some of these jolly fellows, most of them journeymen mechanics, and hear them sing their rhapsodies, in which many fine, natural, unsought poetical flashes, lighten through the clouds of their uncouth language. The like pleasure was for-

merly enjoyed in Florence, at Ponte Santa Trinita, where the *improvisatori* would resort with their luthe, or their guittar, and challenge one another to sing, like the shepherds of Theocritus or Virgil. This was in the joyful days of the *Medicis*. Thuscany is now more like a mournful daughter, heartily bewailing the loss of a tender, careful, and indulgent father ;—her times are changed ; even her language, one of her chief boasts, is corrupted,—Frenchified by the Lorainese, and Germanised by the Austrians that have crept among her inhabitants with her new masters.

The ordinary method of being admitted a member of the society of Arcadia, is to be proposed by two of the Arcadians, who answer for his abilities and good behaviour ; and every person that has had a good education may be admitted. But when the fame of the Arcadians began to spread, and that people of rank, and cardinals began to frequent as auditors, which at first was permitted only to the Arcadians, the *custode Alfonso* devised the admission by acclamation. The cardinals who were most assiduous in attending their rehearsals were *Carpegna*, *Buonvisi*, *Panzilio*, *Ottoboni*, and *Albani*, who was afterwards exalted to the pontificat. In the year 1695, one day they had been all five attending the first meeting the Arcadians had in that year, a general assembly was formed, and when the cardinals were gone out, they were unanimously, *viva voce*, acclimated Arcadian shepherds ; and it was afterwards decreed, that none should be received an Arcadian, by acclamation, but monarchs and sovereign princes,

cardinals, grand masters of military orders, the senator of Rome, viceroys, ambassadors of princes or republics, and the nephews of popes actually reigning.

The deduction of colonies was one of the strongest instruments the Romans made use of, even from the times of Romulus, to form and to maintain the happiness and splendour of their wise commonwealth, and their powerful empire. By easily admitting strangers to the privilege of Roman citizens, and by sending citizens from Rome, among foreign nations, Rome did, in a manner, form one people of the many nations she conquered, and gradually conveyed to them her manners, and her laws; and established by her prudence, what she had acquired by her valour. Although I do not pretend to compare with the real dominion of the Roman republic, the affairs of our literary assembly, which are only imaginary, yet, I may say, that by the same means which ancient Rome made use of to make all the nations become Romans, our *Arcadia* has attained to make one body of all the *literati*, at least the Italians, to the purpose of propagating that good taste in writing, which had been adopted by the Arcadians, and which at that period was not to be found among others; and in order that Italy should recover the possession of thinking justly, and of writing according to the rules and the models of her own best authors. The means to attain this, have been an easy reception of any person that discovered a genius capable of shining some day or other in the sciences or *belles lettres*; and in deduc-

ting colonies among the literati who were far from Rome. By the first, youth is accustomed to imbibe early the best stile; and, by the second, the same good stile has been introduced and is preserved among the most lively, and most illustrious geniuses of Italy. There are above sixty of these colonies, in different parts of Italy, and one even in *Carinthia*, in the town of *Lubiana*.

The colonies depend on the general assembly in some particular things; but are free to keep their literary assemblies when and where, and on what subject they please, and create their own magistrates, and choose their censors. The authority the general assembly has reserved to itself over them, is to ratify the choice of their new shepherds, and deliver their *diplomas*, without which they are not considered as Arcadians; to choose the *vice custode* of the colony out of the two presented by the colony; to decide the disputes which may arise in the colonies; and the approbation of the works which are intended for the pres<sup>s</sup>, with the Arcadian names, or the arms of the colony, or that of the general assembly. The arms or emblem of Arcadia, is the seven reeds, or *syringa*, which the colonies quarter with their own.

As the institutors of this pastoral society had devised to conceal, under pastoral names, the persons who composed it, they likewise imagined to make use of the Olympiads of the ancient Greeks in their date of time. Thus, after the course of about fifteen centuries, that the computation by Olympiads had ceased, our literary society resumed the use of it, and destined the end of every Olympiad for the cele-

bration of the Olympic games, by substituting for the games formerly directed for bodily exercise, others established for the exertion of the mind and talents. The commission to settle perpetual Ephemerides to be observed in the affairs of Arcadia, was given to two famous astronomers, *Selvaggio*, (*Monsignor Francesco Bianchini*,) and *Aci*, (*Dottor Eustachio Manfredi*,) who made their exact observations, and presented them to the general assembly in the year 1693, when it was decreed, that, from that time forward, all the business in Arcadia should be regulated according to them. The joyful and melancholy days were fixed,—the first to be marked by the custode with a laurel branch,—the second with one of cypress. Melancholy days, are those in which the death happens of an acclammatcd Arcadian, of a general *custos*, or of any that are actually colleagues or *vice custode* of a colony ; joyful, that of the pope's election, with the two following days ; of any Arcadian being raised to be a sovereign, or a cardinal ; that of the election of a new *custode* ; and all those days in which there is the meeting of a general assembly. Three particular days are considered perpetually joyful, the 5th of October, on which this literary society was instituted ; the 20th of May, when the laws were proclaimed ; and 25th of December, in which falls the commemoration of the nativity of *Jesus Christ*, the tutelar saint of Arcadia.

From this rough sketch, one may well understand, in what esteem and renown our pastoral society has, from its infancy, been held all over Italy, so as to make all the Italian *literati* willingly submit to

the revolution it produced in reforming the bad taste that prevailed in that time; to induce all the Italian sovereigns to encourage literary assemblies in their dominions, as colonies of the Roman Arcadia, and many of them to become Arcadian shepherds themselves; and to favour, with all their power, this literary society, far from having the least jealousy that the appearance of so perfect a democratical government, might ever influence to the destruction of monarchy. I am, dear Sir, your most humble servant,

FILILLO LIPAREO. P. A.

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## GRAMMATICAL DISQUISITIONS.

*Continued from p. 204.*

### *Of the derivatives from personal pronouns.*

THE above are all the variations, as far as I at present recollect that the personal pronouns themselves admit of. But there are several words which have been usually admitted into the class of pronouns, some of which being plainly derived from the personal pronouns, and nearly connected with them, require to be here particularly adverted to. The words here alluded to may be arranged into two classes, as under :

Class First, *My, Thy, Our, Your, Her, Their.*

Class Second, *Mine, Thine, Ours, Yours, His, Hers. Its, Theirs.*

With regard to these words, we do not find that grammarians are agreed by what name to call them, or what rank they should hold; but almost all agree in classing them among the pronouns, from which they

are obviously derived. Without spending time in examining their several hypotheses, let us rather try if we can at once discover what are the real distinguishing characteristics which should determine their name and situation in grammar.

It is, in the first place, very evident, that the word *my*, is equivalent, in power, to what has been usually called the *genitive* case of our English noun, being in signification very nearly equivalent to the phrase *of me*. Thus, the phrase, “this is *my* house,” has nearly the same meaning as if it were, “this is the house *of me*.” By a similar mode of analysis, we shall find that the words, *thy*, *our*, &c, of the first class, are precisely of the same import with *my*, having in all cases a meaning nearly the same with that of the pronouns from which they are respectively derived, when the word *of* is prefixed to them.

We observe also, in the second place, that the word *mine* has a signification nearly allied to that of *my*, though it obviously differs in certain particulars. We can, for example, say with propriety, “this is *my* house,” but not, “this is *mine* house.” And the same observation will apply to all the other words of this class.

Again, we say,

“*My* house is better than *thine*; but *thine* is more elegant than *mine*.”

In this sentence it is evident that the word *mine*, is substituted for the phrase, “*my house*,” i. e. “the house *of me*;” and the word *thine*, for the phrase “*your house*,” which is equivalent to “the house *of thee or you*.” Accordingly, we find that the sense would be the same were it written in either of these ways, as under.

*My house* is better than *thine*; but *thine* is finer than *mine*, or,  
*My house* is better than *thy house*; but *thy house* is finer than *my house*. or,  
*My house* is better than *the house of thee*; but *thy house* is finer than *the house of me*.

The word *thine*, therefore, in this example, is nearly equivalent to “*thy house*, or *the house of thee*,” and *mine*, to “*my house*, or *the house of me*.”

Again, should we attempt to banish the words *mine*, *thine*, and the others ranged in the *last* class, and substitute those of the *first* class in their stead; we should find a great want in language.

Thus, continuing the same phrase,

“ *My house* is better than *thy*; but *thy* is finer than *my*.”

We immediately recognise, that, unless the word *house* be added to the words *thy* and *my*, the sense must be incomplete, which is not in the least necessary when *mine*, *thine*, and others of the same class are employed.

By this kind of analysis we are led to perceive, that the words belonging to the *first* of these classes, *my*, *thy*, &c. cannot with propriety be called *pronouns*, seeing they do not come in the place of any noun whatever. But that, instead of a *noun*, they only supply the place of a *pronoun* itself; and that the very *pronoun*, whose place this word occupies, is not itself the substitute of a *noun* on this occasion; but merely the substitute of a *definitive* only. To make all this plain, let us suppose in this case the speaker to be *James*, and the person addressed to be *John*, then the phrase “*my house*,” would be exactly the same with “*James's house*.” The word *my* is therefore an exact substitute for the word *James's*, which I had occasion to show on a former occasion, is not a *noun*, but a *definitive* only. In

the same manner we might show that “*thy house*,” was the substitute of *John’s house*; and so of all the others of this class, which on all occasions are the substitute of some definitive, and of nothing else.

On the other hand, we are also led to perceive, that the words *mine*, *thine*, and others of the same class, become the substitutes, not of the definitive alone, but of the *whole noun with its definitive*, “*John’s house*.” Thus the phrase,

“ *My house is better than thine*,”

supposing the parties to be *James* and *John*, as above, is precisely equivalent to the phrase,

“ *James’s house is better than John’s house*.”

in which the word *thine*, plainly becomes the substitute of the whole noun with its definitive, *John’s house*, though *my* is only the substitute of *James’s*.

Hence we are farther led to observe, that the words of the *first class*, *my*, *thy*, &c. are nothing else than a certain class of *definitives* derived from *pronouns*, which may, in a pronomial fashion, become the substitutes of a particular class of *definitives* derived from nouns in a certain manner; and therefore may be called, for want of a better name, *pronomial definitives*. The words *mine*, *thine*, and others of this class, however, do more, as they become the substitutes, alike, of the noun and its definitive; and as it has been the custom on some occasions to call these words *pronouns possessive*, I can see no harm that would result from allowing them still to retain the same name.

According to this distinction then, our personal pronouns, with these derivatives from them, might stand as under.

A Table of the English PERSONAL PRONOUNS, with their DERIVATIVES, and the VARIATIONS these words respectively admit of.

Pronoun of the 1st Person.		Pronoun of the 2d Person.		Pronoun of the 3d Person.		Nouns
Singular. <small>Plural.</small>		Singular. <small>Plural.</small>		Singular. <small>Plur.</small> <i>Masc. Fem. Neuter.</i>		
Nominative,	I	We	Thou or you	Ye or you	He She It	They
Accusative,	Me	Us	Thee or ye	You	Him Her It	Them
Definitive,	My	Our	Thy	Your	His Her Its	Their
Pronoun possessive,	{	Mine	Ours	Thine	His Hers Its	Theirs
					John's Ann's Cyder's	

N. B. Wherever a word is obliged to perform a double office, it is printed in Roman characters, where it stands in its proper place; and in *Italics* when placed where it ought not to be.

By glancing over this table, we are enabled to discover some defects in our language, that otherwise are not very apparent, which have not, that I know, been hitherto remarked. Thus, in the pronoun of the third person singular, we observe that the words *his* and *its*, are each of them compelled to perform alike the office of *definitives* and *possessives*. The word *her*, is, in like manner, forced to do the double office of *accusative* and *definitive*, while the word *it*, performs alike the office of *nominative* and *accusative*. These are great defects which have escaped our notice, merely because custom has rendered this double use of them quite familiar to us. The following example will illustrate this position.

“ *His house* is better than *hers*, but *hers* is finer than ~~mine~~”

“ *My house* is better than *yours*, but *yours* is finer than *MINE*.”

In this example the word *his* performs, alike, the office of *my* and *mine*, yet the meaning appears complete, though we have already seen that *my*, if substituted for *mine*, could not be at all tolerated. Again, in the phrase,

“ It struck ~~HIM~~ and cut ~~HIS~~ eye brow;”

“ It struck ~~HER~~ and cut ~~HER~~ eye brow.”

We observe that the word *her* performs, alike, the office of both the words *him* and *his*, without appearing in any respect improper. How absurd would it seem if we were to say,

“ It struck ~~HIM~~ and cut ~~HIM~~ eye brow.”

The same impropriety might be, in like manner, pointed out with regard to the double office performed by the words *it* and *its*. But as this will be sufficiently obvious, I do not dwell upon it. It must

be admitted, that we here meet with a very capital defect in a radical part of our language, which requires to be corrected.

One observation here obtrudes itself upon us, and must not be omitted. Many English grammarians have supposed, from the accidental circumstance of the word *bis* ending with the letter *s*, and assuming something like a genitive signification, that those words which have been called English genitives have been formed by adding this letter to the noun, and "*James's house*" has been supposed to mean "*James bis house* ;" the word *bis*, being softened by elision into 's : and some of our best writers have an occasional refinement founded upon this principle. It has, however, been justly observed by others, that this could not be the case, seeing our feminine nouns admit of the same inflection, though the word *her*, and not *hers*, is used in that sense, which has been called the genitive case. Thus, we say equally "*James's house*," or "*Ann's house* ;" though, were we to try to form the genitive on the same principle, we would be obliged to say, "*Ann hers house*," and not "*Ann her house*." This idea therefore is sufficiently refuted from this consideration alone.

From the view we have taken of this subject, we are enabled farther to observe, that in the whole list of pronomial definitives, *my*, *thy*, &c. it happens invariably that this *definitive*, or *genitive*, as it has been called, does not at all admit of the final *S*. unless it be in the two words *bis* and *its*, already taken notice of, as being obliged to perform, alike, the office of the *definitive* and the *possessive*. Whereas the *pos-*

*sessive* is as universally formed by adding the final *S*, the words *mine* and *thine* being only excepted \*. Hence I would infer that the words *his*, and *its*, belong properly to the class of *possessives*, and have been compelled, for want of a proper word for the *definitive*, to do its office also.

From this kind of analysis we are also farther led to observe, that all those words derived from English nouns by the addition of an apostrophised 'S, which have been usually called *genitives*, are always employed to perform the double office of both *definitive* and *possessive*, and are, in this respect, exactly in the same predicament with the words *his* and *its*, above taken notice of. To prove this, we shall adopt the following illustration. In the sentence, " *my house* is better than *yours*, but *yours* is finer than *mine*," we find, as has been already remarked, that the word *house* can only with propriety follow that class of words which we have called above, *definitives*; but it never can follow any of those belonging to the class of *possessives*. Hence it must be added to the words *my* and *your*, before any meaning can be got; but it cannot be joined with the word *yours*, nor *mine*; we may therefore render that sentence thus,

*My house* is better than *yours*, but *yours* is finer than *mine*, or  
*My house* is better than *your house* but *your house* is finer than *my house*.

\* By the bye, in the provincial language of Edinburgh, these words are formed according to the strictest analogy, and are not pronounced *mine* and *thine*, but *mines* and *thines*; of the last however I am somewhat uncertain.

We have already seen, however, that the word *bis* is obliged to perform the double office of *definitive* and *posseſſive*, thus,

“ *His house* is better than *hers*, but *hers* is finer than *bis*.”

In which example, the first *bis*, stands as a *definitive*, and as such requires to be joined with the noun it defines; and the last *bis*, stands as a *posseſſive*, and requires not the noun to be added.

In like manner, should we attempt to express the meaning of this sentence, by repeating the names of the persons, without using any pronomial word whatever, we shall find that these genitives, as they have been called, may be in all cases applied equally in place of the *definitives*, *my*, *thy*, &c. and the *posseſſives*, *mine thine*, &c. like the word *bis*, without any change. Thus, the sentence,

“ *James's house* is better than *John's*, but *John's* is finer than *JAMES's*.”  
is equivalent to

“ *My house* is better than *bis*, but *bis* is finer than *MINE OR MY HOUSE*.”

Here the word *James's* performs alike the part of *my*, and of *mine*. For, similar to *mine*, we say as above, *James's*, or similar to *my house*, we might equally say, “ finer than *James's house*.” In like manner we may either say, as above, “ better than *John's*,” or at pleasure, “ better than *John's house*;” the word *house*, or the noun explained by the *definitive* being in all cases of this sort, either added or suppressed at the pleasure of the composer, which cannot be done either with the words *mine* or *hers*. To render this still more plain, I shall vary this sentence in many different ways, as in the table annexed.

TABLE:

FIRST.      SECOND.      THIRD.

<i>My</i> house, not <i>mine</i>	<i>Yours</i> , or your house, not <i>yours</i> house	But <i>yours</i> , or your house
<i>His</i> house, not <i>hers</i>	<i>His</i> , or his house, without change	But <i>his</i> , or his house
<i>His</i> house	<i>Hers</i> , or <i>her</i> house, not <i>hers</i> house	But <i>hers</i> , or her house
<i>James's</i> house	<i>John's</i> , or <i>John's</i> house, without change	But <i>John's</i> , or <i>John's</i> house
<i>John's</i> house	<i>James's</i> , or <i>James's</i> house	But <i>James's</i> , or <i>James's</i> house
<i>Mary's</i> house	<i>Ann's</i> , or <i>Ann's</i> house	But <i>Ann's</i> or <i>Ann's</i> house
<i>Our</i> house	<i>Theirs</i> or their house, not <i>theirs</i> house	But <i>theirs</i> , or their house
<i>Our</i> house	<i>Mine</i> , or my house, not <i>mine</i> house	But <i>mine</i> , or my house

Mine, or my house  
Hers, or her house, not *hers* house  
His, or his house  
James's, or James's house  
John's, or John's house  
Mary's, or Mary's house  
Ours, or our house, not ours house

is *theirs* than  
is *mine* than  
is *mine* than

Yours, or your house

FOURTH.

<i>My</i> house, not <i>mine</i>	<i>Mine</i> , or my house
<i>His</i> house, not <i>hers</i>	Hers, or her house, not <i>hers</i> house
<i>His</i> house	His, or his house
<i>James's</i> house	James's, or James's house
<i>John's</i> house	John's, or John's house
<i>Mary's</i> house	Mary's, or Mary's house

N. B. In this table all the words in the first column, *my*, *her*, &c. are *definitives*. Those in the second column, are all of that class of words which we have called *pronouns possessive*; as are those of the third and fourth columns also. By glancing the eye on these columns, from top to bottom, is seen at one glance, where the language is regular, or the reverse. Where the same word occurs in both columns, the language is defective;—in other words, there is a want either of a regular *definitive* or *possessive*. Thus we perceive that the word *his*, is irregular; and that, in the same manner, all those *definitives* that have been called *genitives*, are obliged to perform alike the office of a *definitive* and *possessive*.

From a consideration of this table, it clearly appears, that the supposed English genitives perform, in all cases, a double office, exactly analogous to that which is performed by the word *his*; which, by not having been adverted to, has augmented the perplexity that these words have occasioned in our grammatical arrangements.

*To be continued.*

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## ESSAY ON WATER.

CONSIDERED AS A MOVING POWER ON MACHINERY.

*Continued from p. 210.*

IF a considerable weight is appended to one side of a wheel that rests upon a pivot in the center, and none at all upon the other side of it, it will follow that the side with the weight appended to it will always descend, and the light side rise upwards, so as to communicate a continued rotatory motion to the wheel.

It is in this way that water becomes a moving power, by its *dead weight*; for if buckets be so fixed upon the wheel as to have their mouths upwards, and open to receive a stream of water as they pass under it, at, or near the top of the wheel on one side, so as to descend full, the mouth of these buckets must be turned downwards at the bottom of the wheel, if immoveably fixed upon it, so as to ascend empty. The inequality of weight between the two sides of the wheel must thus continue as long as the water flows into the buckets, and of course the rotatory motion of the wheel must continue also.

But many particulars must be adverted to, before we can ascertain whether that water can be so applied, as to produce the greatest effect possible.

We shall, for the present, lose sight of the water entirely, and, for the sake of illustration, we shall suppose that a number of equal weights could, by some magical powers, be hooked upon the wheel at a certain place as it turns round, and taken off again in the same way below.

On this supposition we shall easily perceive, that the same weight will produce a much more powerful effect upon one part of the wheel, than upon another part of it. Let A, B, C, D. fig. 1. represent a wheel moveable upon its pivot P; and let the several dots upon one side of it, represent a number of equal weights, affixed in the manner above mentioned to one side of the wheel. I would observe:

In the *first* place, that the weights at A, and C, can have no tendency whatever to produce any motion in the wheel; because the one being perpendicularly above the pivot, and the other acting perpendicularly below it. they can have no tendency to move it to either side.

Each of the weights a, and b, however, will have a tendency to move the wheel in a certain degree; because they are placed a little towards one side of the center; but their moving power will still be small, because they act only upon a radius of small length when compared with that at B. Mathematicians have long ago ascertained, that the power of any given weight, acting on a lever, is always in proportion to the length of that lever; so that, suppo-

sing the length of the lever P B to be four, and the distance P *p* one, the power of one pound weight, appended at B, will be as four, while that at *a* or *b* will be only as one; so that one pound at B has an equal force as four at *a* or *b*. By a similar mode of investigation, we should find that the weights went on in the same rate, from nothing at A or C, to sixteen at B; or, in other words, the aggregate power of the whole weights, if thus appended, would be only one fourth part nearly, of what that whole aggregate weight would be, if it could all be applied at the point B only, and to no other part of the wheel.

By this mode of reasoning we are led to perceive, that if, instead of making the water fall down an inclined plain, E B, as it is usual to make it act by its *impetus*, we should lead it forward in the direction E A, till it came to *a*, where it was emptied into a bucket, in order to make the water act only by its *dead weight*, we should still lose, in this way, a considerable part of the possible power of the water, even if the buckets should be so contrived as to lose none of it in the course of its descent; a circumstance that can never be obviated where *fixed* buckets, of any construction, are employed upon a wheel of large diameter. This is so obvious as to require no illustration. Therefore, where buckets are fixed upon the wheel, the difference of power between buckets appended [at equal distances from each other on the wheel, or of one bucket constantly acting at C, equal in weight to the whole, becomes much greater than the proportion here assigned.

If, with a view to obviate this inconvenience, we should think of increasing the diameter of the great wheel, so as to make the top of it rise higher than the level of the water course, as represented by the dotted lines, the evil would be remedied, in as far as respects the *upper* part of the wheel; but still it operates with the same force in as far as respects the *lower* part of the wheel. Where this augmentation of the diameter of the wheel is even practicable therefore, by reason of the moderate height of the fall, there still must be a very great waste of water when *thus* applied but where the height of the fall is very great, as from fifty feet and upward, as no wheel could be made of a diameter nearly equal to this, the loss of power that is thus incurred can scarcely admit of a calculation.

From these few obvious considerations it is evident, that if we ever hope to derive the full power of a small stream of water, falling from a very great height, we must abandon the idea of making that water act directly on a wheel itself, and make that power be applied to the wheel, by the intervention of some other contrivance better adapted to the purpose than a single wheel in any situation ever can be.

One would suppose, that, when an apparatus of that sort had been discovered, which was equally simple in its construction as economical in its application, it would have been at once universally adopted. But our reasoning is here fallacious; and experience proves, that though man is eager to seize advantageous improvements when they are pointed out to him, his mind is exceedingly slow at applying the

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powers that are familiar to him to other purposes than those to which he has seen them applied. In proof of this, I have only to observe, that the following contrivance for raising a great weight, by means of a very small current of water, has been known to every student of physics for more than a century past, and has never, that I have heard of, been once employed for the purpose of turning machinery, or mill work of any kind ; though it is perfectly well calculated to obviate all the difficulties above stated, and to give to water, *falling from a great height*, all the effect of which it is susceptible as a moving power.

Let a small wheel A, fig. 2. be fixed so as to turn upon a pivot at the height of the fall of water D, C ; and another wheel, exactly similar to it B, at the level of the bottom, from whence the water has a free exit ; and let an endless chain be passed over these two wheels, to which is fixed a number of buckets in the position indicated in the figure. In this way no limits can be set to the length of the chain. Let the fall be fifty feet or a hundred, or five hundred feet if you will, there is nothing impossible in thus connecting the whole, and of thus deriving the full benefit of the entire weight of the whole water, without any diminution : for not one drop of water can be spilled in descending from the highest to the lowest part of the apparatus.

Let us, for the sake of illustration, suppose, that a stream of water could be commanded, so small as that it ran only a pound weight in a second of time, having a fall of fifty feet, and that the whole of this water was received into the bucket at the top, so as, by its gravity, to produce a rotatory motion of such

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velocity as that the chain made one revolution in five minutes. On these data, let me ask what would be its force as a moving power?

Say, the half of five minutes, is two minutes and a half. In two minutes and a half there are 150 seconds; and consequently the full buckets, on one side, would, at all times, exceed the empty ones on the opposite side by 150 pounds; of course, even this small stream would act with a power equal to 150 pounds upon any machinery to which it was applied. But an ordinary mill stream, instead of *one* pound in a second, discharges nearly *a hundred* pounds weight of water in the same time. With such a stream, the power of a machine on this construction would be equal to 15,000 pounds,—a power that no strength of machinery could withstand. Where such a stream therefore could be commanded, with such a fall, it might be subdivided into a great many smaller ones, each of which would have power sufficient to turn a mill. If the height were a hundred feet, the power of the same stream would be doubled; and so on for any greater height.

Nothing can be more simple than the applying this power, so obtained, to the moving of machinery. It is only to place a vertical wheel, corresponding to the water wheel of an ordinary mill, at one side of this moveable chain, having upon it, instead of flat float boards, firm pins, or teeth, fixed in it at regular distances, to be laid hold of by others corresponding to them, made by the pins that connect the links of the chain; so that, in proportion as the chain moves, the

wheel must be turned round with the same velocity \*. In this case none of the power would be lost, because its whole force is perpetually applied at the very point of the lever (*b.* fig. 2d.) where it must produce its greatest effect. The apparatus is so simple, and the conclusions so indubitable, that mere inspection of the figure is sufficient to convince every person of the most moderate understanding, so that farther illustrations are perfectly needless. I shall only just make one remark here, which is indeed sufficiently obvious, that, were a moving power of this sort adopted, it would be as easy to apply it to a wheel placed in the top, as in the bottom of a building, or to one in every stage of it, if necessary.

In this way may be obtained the full benefit of the greatest height of any fall of water, without losing the smallest portion of its weight as a moving power; a thing that is altogether impracticable by any other means that has ever yet been adopted. Even with regard to falls of moderate height, where a wheel could be made of such a size as to receive the water into buckets, at its full height, much power would be gained by hanging the buckets to a chain in this manner, and making the water, by this means, act always by its whole weight nearly, upon the horizontal or longest lever of the wheel, as at *b* fig. 2. and nowhere else. It was from a contemplation of the infinite force that might thus be obtained in the Highlands of Scotland, for turning machinery, that I have

\* *E*, represents that wheel, with the pins *h.* Fig. 3d, shows a front view of the chain, with the catch pins, *b*, *b*, and a section of the edge of the wheel at *A*, with its forked pins to catch the pins of the chain as it moves.

so often taken notice of the amazing advantages which that country enjoys above all others for manufactures, by machinery; nor is this the only advantage it possesses in this respect, as I shall have occasion to show at some other time. While I contemplated these things, which seem never to have fallen under the observation of any other person, it will not be deemed wonderful, if I have expreſſed myself rather more forcibly on that ſubject than first they could ſee reaſon for,—many things appear paradoxical, when ſimply announced, which, when explained, are ſimple and obvious truths.

The above may ſerve for giving a general notion of the mode of applying water with advantage, for the purpose of moving machinery, *where the fall is great*. In another paper I ſhall endeavour to give ſome general notions respecting the application of water, as a moving power, in every country, *where no kind of cascade can be commanded*.

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### DETACHED REMARK.

TAKE care never to provoke enemies by severities of censure; yet ſuffer not yourſelf, in defence of a good cause or ſentiment, to be overawed or depreſſed by the presence, frowns, or insolence, of powerful men; but persist on all occasions in the right, with a resolution always present and calm. Be modeſt, yet not timorous; and be firm without rudeneſs.

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POETRY.

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ODE OF HAFEZ.

[TRANSLATED FROM THE PERSIAN BY SIR WILLIAM JONES.]

HITHER, boy, a goblet bring,  
Be it of wine's ruby spring;  
Bring me one, and bring me two,  
Nought but purest wine will do!

It is wine, boy, that can save  
E'en dying lovers from the grave;  
Old and young alike will say,  
'Tis the balm that makes us gay.

Wine's the sun.—The moon, sweet soul,  
We will call the evening bowl:  
Bring the sun, and bring him soon,  
To the bosom of the moon!

Dash us with this liquid fire,  
It will thoughts divine inspire,  
And, by nature taught to glow,  
Let it like the waters flow!

If the rose should fade, do you  
Bid it chearfully adieu:  
Like rose water to each guest,  
Bring thy wine and make us blest.

If the nightingale's rich throat,  
Cease the music of its note;  
It is fit, boy, thou shouldst bring  
Cups that will with music ring.

Be not sad; whatever change  
O'er the busy world may range;  
Harp and lute together bring,  
Sweetly mingling string with string!

My bright maid, unless it be  
In some dream, I cannot see;  
Bring the draught that will disclose  
Whence it was sleep first arose!

Should it chance t'o'erpow'r my mind,  
Where's the remedy I find?  
'Tis in wine.—Then, boy, supply  
Wine, till all my senses die!

Unto Hafez, boy, do you  
 Instant bring a cup or two :  
 Bring them : for the wine shall flow,  
 Whether it be law or no !

## THE LAPLANDER.

A SONNET BY MRS CHARLOTTE SMITH.

THE shiv'ring native, who, by Tenglio's side,  
 Beholds, with fond regret, the parting light  
 Sink far away, beneath the dark'ning tide,  
 And leave him to long months of dreary night;

Yet knows, that, springing from the eastern wave,  
 The sun's glad beams shall re-illumine his way,  
 And, from the snows secur'd, within his cave,  
 He waits in patient hope returning day.

Not so the suff'rer feels who, o'er the waste  
 Of joyless life, is destin'd to deplore  
 Fond love forgotten, tender friendship past,  
 Which, once extinguish'd, can revive no more :  
 O'er the blank void he looks with hopeless pain ;  
 For him those beams of heaven shall never shine again.

## SONG.

*For the Bee.*

FLY no more, cruel fair, but be kind and relenting,  
 Enough has been shewn of contempt and disdain ;  
 Taste at length the superior delight of consenting,  
 For 'tis much nobler joy to give pleasure than pain.

Would you charm men of sense, and engage their addresses,  
 My Chloe of pride, as of painting beware ;  
 For beauty consists more in minds, than in faces,  
 And the maid's almost ugly, that only is fair.

## EPIGRAM.

*For the Bee.*

SIR JIMCRACK round his hall, hangs all things odd,  
 An embalm'd pismire, and a straw stuff'd cod ;  
 Alike to things antique his taste inclines,  
 Old Roman shields, maim'd heads, and rusty coins ;  
 But if the oldest, oddest thing in life  
 To these you'd hang, Sir Jimcrack,—hang your wife.

## A NEW KIND OF FENCE DESCRIBED.

FENCES about land are a very expensive and troublesome article to the farmer; whatever, therefore, tends to diminish this expence, and to render the fences more complete than those now in use, will be accounted a valuable improvement.

There are two principal descriptions of fences; walls and hedges. Walls have the advantage over hedges, in being an immediate fence, as soon as they are made; but they are expensive, and unless made of the best stone and lime, perishable.

Hedges, on the other hand, cost less money at first, and when they are once completed, they are very durable; but they require to be long nursed, and carefully tended when young, so that it is many years before the person who makes them can derive any material benefit from them. It thus happens that they are too often neglected when young; and if this be the case, it is scarcely possible to make them ever afterward a complete fence at all.

I am now to describe a kind of hedge which can be reared at a small expence—is a fence as soon as made, —will continue perfect and firm for a great length of time, without needing any repairs;—and, without rambling too much to damage the crops around it, will afford a greater quantity of brush for fuel, or other purposes, than any other kind of hedge now in use.

To effect all these purposes, it will be necessary to prepare, near the spot where the fence is wanted, a piece of rich clean ground, for a nursery, some years before the hedge is intended to be planted; procure, in the month of October or November, a sufficient quantity of cuttings of the balsam poplar;—wood of the second year's growth is

best: after digging the ground properly, let these be planted in a nursery in rows, one foot distant from each other, and the plants six inches apart in the rows. Hoe them, and keep them clean, till the plants have attained a proper size, which may be in three or four years. If the soil has been good, the plants in that time will be eight or ten feet high, and the thickness of a man's thumb, at the height of four feet, which I should reckon a proper size for the purpose intended.

When you have, by this means, or otherwise, obtained a proper supply of plants, lay out your fields as you intend them, the winter before you mean to plant; and if it be a plain field, plough up a narrow ridge where you intend to plant your hedge, or dig it with the spade, where the plough cannot go; give it a winter and spring fallow, to clean it from weeds, and loosen the soil. Dung this small ridge very thoroughly; and as the ridge needs not exceed six or eight feet in breadth, a very little dung will go a great way; and sow it with turnips. Hoe them properly, and keep the ground clean. When they are taken off in November, the ground will be in excellent order for planting.

When the ground is ready, take up your poplar plants; prune off the tops, at the height of six feet from the ground, and, having trimmed the roots, plant a row of them, by line, near the middle of the prepared ridge, at the distance of not more than one foot from each other, or less, if the roots will permit. Let these all slope in one direction, as in the plate fig. 4. parallel to each other, in the direction of the hedge, as at A B fig. 4. The ground plan is represented in fig. 5. where the same plants are represented;—those sloping to the right hand from A to B.

When this row is completed thus, stretch the line parallel to the former, at the distance of fifteen or sixteen

inches from it, as in the dotted line, D E fig. 5. and plant in that line another row, sloping the reverse way, as from D to E. fig. 4. When these two lines are completed, the fence, when viewed sideways, will have the appearance represented at C C D B fig. 4. This kind of rail, however, is not interlaced, as in a basket; but the two rows are kept quite distinct; as must appear evident by inspection of the ground plan fig. 5. A B represents the ground plan of those that slope from left to right; and D E the plan of those that slope the reverse way, the tops of which meet at C C fig. 4.

These two rows, however, though distant from each other at the bottom, are made to incline inward, so as to approach each other at the top, as in fig. 6. which represents an end view of the fence when completed.

To complete the whole, let a thin slit of deal, like a tile lath, be stretched along the top, as from C to C fig. 4. so as that the stoops on each side of it, come close to it as in fig. 4. the whole being bound by means of a straw rope twisted round this lath and the top of the stoops; and the skeleton of your fence is completed. In this state it assumes the appearance, and is an equally good fence as a rail would be.

To render it complete, however, you must take care, after one side of the fence is finished, to lay the earth that is to be in the interval between the two rows perfectly smooth, and to plant, with a dibble, a row of sweet briar plants, as from *a* to *b* fig. 5. These plants should not be more than two years of age; and their tops, at the time of planting, should be cut over quite close by the ground. This will make them push out with great vigour, so as quickly to fill up the whole interval between the plants, and to make a hedge as close as could be wished. If the ground be good, and the operations properly

conducted, some of these sweet briars will make shoots of four feet in length the first year.

It will be necessary to be at some pains to pull out by hand, the first year, any weeds that may spring up between the rows; and to hoe down those that may spring up on either side.

The poplars will make shoots equally vigorous as the sweet briar; so that the first year some of the young shoots will be from two to three feet in height. Any shoots that spring out from the stem will rise up perpendicularly, so as to form a secondary kind of ribs. These, if laid in by the hand once a-year, so as to bring them on the inside of the original stems, will in time acquire strength, as the original ribs do, so as to resist any force. The sweet briar, which, of itself, would fall dangling to one side, is thus kept firm and upright in the center; the shoots which push through between the ribs, ought to be cut off with a hedge sheers once a-year. The hedge being thus wider at the bottom than the top, will always continue green and vigorous. The poplars will gradually assume the size and strength of trees, so as to be utterly impenetrable by any force. At top they will send out a vast profusion of vigorous shoots, not less than three or four feet high, and of proportional thickness, each year; so that if these tops be lopped off every second year, they will afford an immense profusion of brush wood, which may be employed as fuel, or for any other purpose wanted.

After the first year, the croſs rail at the top will be no longer wanted. Indeed, where cattle are not to be put into the field the first year, it is not necessary at all. Nor is it advisable to put cattle into the field the first year; for although it may be a fence, yet as the shoots of the poplar are smooth, and the leaf liked by cattle, they will brouſe upon it, and render the fence less ſightly than it otherwise would be.

After the second year, however, the sweet briar will cover the whole so effectually, as to render this perfectly safe from all attacks.

\* \* \* I am convinced, that, were truncheons of poplar, of a proper size, cut over and planted without roots, they would succeed perfectly well ; and the fence could thus be made at a much smaller expence, than by rooted plants ; but never having experienced this myself, I only offer it as matter of opinion. Any kind of straight shooting willow could be employed for the same purpose in a rich soil.

Fig. 6. represents an end view of the hedge, in which A is the hedge new planted, before it has set out any shoots. B, the same hedge after it has been planted a year or two, and has shot out some strong shoots. C, the same hedge when farther grown, the top shoots cut off, and the sides properly trimmed.

#### TO CORRESPONDENTS.

THE hints by *Curiosus* shall be taken into consideration.

The favour by an *Old Correspondent* is revised, and shall have a place with the first convenience.

The communication by *Miscrentes* will appear in next number if possible ; and here this alteration ends.

The Editor, though grateful for the good intentions of *Tom Idle*, regrets that he should have taken the trouble of transcribing such a long story which cannot suit the *ee* ; as it has been related in almost every periodical publication in Britain. Reproductions are only here admitted where their merit is conspicuous, or where they are but little known.

*Mr Wright's* acceptable communication is thankfully received, and shall be attended to in due time ; some of the cocoons shall be forwarded the first opportunity.

The Editor returns thanks for the anonymous account of the interment of Charles 1. It would have been more satisfactory if some notice had been given where the MSS. from whence it has been extracted, has been preserved.

The anecdote of *Bathyllus*, though pretty generally known among classical scholars, shall have a place when room can be spared for it.

Many acknowledgements are omitted for want of room.

THE BEE,  
 OR  
 LITERARY WEEKLY INTELLIGENCER,  
 FOR  
 WEDNESDAY, OCTOBER 24. 1792.



THE OUISTITI, WESTITI, OR CAGVI.

THIS is one of the smallest of the monkey tribe, its head and body not exceeding seven inches in length: its tail is long and bushy, and marked with alternate rings of black and ash colour: its face is naked, of a swarthy flesh colour: ears large, and so disposed, as to bear a near resemblance to that fashion of female dress called queen Mary's ruff: its body is beautifully marked with dusky, ash coloured, and reddish bars: its nails are sharp, and its fingers like those of a squirrel.

It is a native of Brazil ; feeds on fruits, vegetables, insects, and snails ; and is fond of fish.

The ouistiti is one of the few classes of the monkey kind which have been known ever to breed in Europe. Mr Edwards says, that it produced young ones in Portugal, which were at first extremely ugly, having hardly any hair upon their bodies. They adhered closely to the teats of their mother ; and when grown a little larger, fixed themselves upon her back, from which she could not easily disengage them without rubbing them off against a wall. Upon these occasions, the male, who discovers a great fondness for them, either compels the female to take them up again, or allows them to mount upon his own back to relieve her.

As this is one of the smallest and most beautiful of the monkey tribe, it is frequently kept in Portugal as a pet in families ; but it is even there tender, and impatient of cold.

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## GRAMMATICAL DISQUISITIONS.

*Continued from p. 250.*

### OTHER and OTHERS.

ENGLISH grammarians have likewise been at a loss what to make of the words *other* and *others*. Dr Johnson, with other grammarians, has classed them among pronouns, and calls *others*, the plural of *other*, for no better reason, seemingly, than that the word *others* has an *s* final, which is the usual plural termination of our nouns, though this rule be not observed in our pronouns. By the same mode of arguing,

*bers* should be the plural of *her*, *yours* the plural of *your*, and *ours* of *our*. A very little attention, however, would have been sufficient to convince Dr Johnson, that the word *other*, has, in general, a plural meaning, as well as *others*. For we may say, “ *other men* went,” or “ *other houses* were sold,” &c. In all which, and similar cases, the word *other* has an evident relation to plurality. The truth, however, seems to be, that the word *other*, is not a pronoun, but merely a definitive; which, like other definitives, must always be accompanied by the noun which it serves to define; and it is one of those definitives that relate to plurality, like many others. If, therefore, we must have a singular to this word, that singular can doubtless be nothing else than *an other*; for we say “ *another man* came,” or “ *other men* came,” exactly denoting the same idea, the one singular, and the other plural. These are, therefore, alike definitives of the same kind. *Others*, is similar in power to those words we have above called pronouns possessive; see table p. 244.

### SELF and SELVES.

Grammarians have been still more at a loss with regard to the word *self*, with its plural *selves*; because of some anomalies that have arisen in the English language, from a deficiency in the inflection of some of our pronouns, that now require to be explained.

The word *self*, denotes an object considered in its totality, without discrimination of parts. It has been universally accounted a pronoun; though I think there is great reason to doubt if it strictly belongs to this class of words. We shall try to ascertain its rank in grammar by the following analysis.

When we say, "I cut my *hand*," we denote the *particular part* of the body that was cut. But, if we wished to express the circumstance **GENERALLY**, we would say, "I cut my *self*;" Here it is plain the word *hand*, in a grammatical sense, is precisely of the same nature with the word *self* ;—the first only denoting a particular member, and the last denoting the object in general, without specification of parts. But it never yet has been thought that *hand* could be reckoned a pronoun ; it has been universally called a *noun*. Why then should *self* be placed in another class?

I can see no other reason for this distinction, unless it be, that, as *self* seldom appears in language without being conjoined with a *definitive pronoun*, it has been thought to be itself a pronoun also. We shall find, however, that the word *hand* is, on many occasions, as necessarily accompanied with the *definitive* as the other. In the example above given, the *definitive my*, equally accompanies both ; and wherever a *particular member* is represented as acting, or being acted upon, the name of that member must be as necessarily accompanied with its *definitive*, to refer it to the *whole* of which it is a part, as if that *whole* were represented, without specification of parts, by the word *self*.

It is indeed true, that when we express a *part*, we can more easily adopt the *nomial* *definitive*, and avoid that of the *pronoun*, than when we mean to denote *the whole* ; because we have more frequently occasion to identify the *whole* to which the *part* belongs, by repeating its name, than when we express the *whole*.

For example, we more readily say, *James's hand*, than *James's self*, for a very obvious reason, *viz.* because the phrase *James's hand*, is, when taken altogether, only one noun; the definitive *James's*, being only necessary to identify the word *hand*. But the whole individual is clearly expressed by the single word *James* alone; and therefore the word *self* is here unnecessary, unless where some particular contrast is implied, or a particular emphasis be given to the phrase.

These considerations, with others that are sufficiently obvious in pursuing this mode of reasoning, satisfy me, that the word *self* is a noun, in the strictest sense of the word, and should be ranked in the same class with the word *hand*; but that, as it expresses the object *generally*, the defining noun alone, can, on many occasions, denote the idea, without obliging us to repeat this particular word; but that this definitive must always be accompanied by the particular object it serves to identify, when a *particular part* or member only is expressed. Where we wish to express that general idea, without appropriating it to particulars, we can equally make use of either of these words as a nominative to a verb, without being accompanied by any sort of definitive: Thus,

“ *A hand* is the most useful member of the human body;” or, “ *Self*, is ever interesting to man.”

We have seen above the reason why those nouns that serve to denote particular parts or members of bodies, are usually defined by the *nomial* definitive; as also why the general word *self*, so often assumes the *pronomial* definitive in language. It now only

remains, that we should point out the cause of some anomalies that are observable in the English language, with regard to the composition of that word *self* with its definitive.

We find, that in the pronouns of the first and second persons, the word *self*, with its plural *selves*, regularly assumes the proper definitive pronoun in composition. Thus we say *my-self*, rejecting, alike, the accusative *me* and the possessive *mine*; for we can neither say *me-self*, nor *mine-self*\*. In like manner we take, in the plural, the proper definitive *our*, and say *our-selves*; and not *us-selves*, or *ours-selves*. The same rule is observed in regard to the pronoun of the second person; for we say, *thy-self*, using the proper definitive, and not *thee-self*, or *thine-self*; and *your-selves*, and not *you-self*, or *yours-selves*. In all these cases, our pronoun admits of a distinct word for the *definitive*, different from either the *accusative* or the *possessive*, and therefore no difficulty occurs. But when we come to the pronoun of the third person, we are at a stand; for, with regard to that pronoun, we find, that, in the masculine gender, there is no particular word appropriated as a definitive †, the word *bis* being obviously the *possessive* only, and not the *definitive*. In this embarrassment, what shall be done? No alternative seems to remain, but either to employ in this case the *accusative* *HIM*, by way of a *definitive*, or the *possessive* *HIS*. Custom has established the first, and we say *him-self*, and not *bis-self*. Some critics, however, observing that the word *bis*, has been for-

\* See table, p. 244.

† Ibid.

ced on other occasions, to perform the office of a definitive, have contended that it should do so here also ; and insist that we should write *his-self*, and not *him-self*. This, however, is only adopting one imperfection in place of another. Had they determined to make any change, it would have been better to have at once devised a new word for the definitive pronoun of this gender, which would have removed the difficulty complained of, and several others they have not taken notice of.

In the *feminine* gender, we also find that the *accusative* and *definitive* are expressed by the same word *her*. And here, according to the general analogy, it would seem that the word *her* should be reckoned, in strict propriety, the *definitive*, rather than the *accusative* ; yet as this word is employed in both ways, we are at liberty to view the word *her* as either ; and it is here employed properly as the *definitive*. But as there is no proper *definitive* for the *neuter* gender, the word *its* being properly the *possessive*, we have, as in the *masculine* gender, adopted the *accusative* in its stead, and say *it-self*. Thus it has happened, that in two of the three genders of the singular number of this pronoun, we have adopted the *accusative* instead of the *definitive*, in composition with the word *self*. And probably with a view to correspond with these, rather than from any other cause, we have adopted **THEM**, the *accusative* plural, instead of the proper *definitive* **THEIR**, and say *themselves*, instead of *their-selves*, which is, without a doubt, the regular word, according to strict analogy.

## Own.

*Own*, as well as *self*, has been usually classed among pronouns; and though we cannot admit it into this class, and though it be also very often connected with *self*, it is yet, in its grammatical characteristics, a good deal different from it. *Self*, we have seen, is to be considered, in strict propriety, as a *noun*; *own*, on the contrary, is merely a *definitive*; and, as such, it must in all cases be connected with some noun which it serves to define.

We have seen above, that all those nouns which are names of the parts only of any object, stand in need of particular *definitives* to limit their general meaning, and make that meaning particular. Among these *definitives*, *own* comes in as an auxiliary to give them greater force and energy. Thus, in the phrase, "I cut *my* hand," the *definitive* *my* fixes the meaning of the word *hand*. But it acquires yet more force and energy, by adding the auxiliary *definitive*, *own*, "I cut *my own* hand" This is the precise idea denoted by the word *own*, on all occasions.

## THIS, THAT, THESE, THOSE.

These four words have also, by many, been classed among pronouns, though they more properly belong to the class of *definitives*. Dr Johnson, who seems to have considered grammar, especially English grammar, as below his notice, though he was under the necessity of writing upon that subject, has been pleased to adopt the idea of their being *pronouns*, without reserve; and, in conformity with this idea, has called *these* the plural of *this*, and *those* the plural of *that*.

It is indeed true that *this* and *that*, never can be employed as definitives along with nouns denoting plurality, and that *these* and *those* always do denote plurality. But that there is no greater similarity between the idea conveyed by the word *this*, and that of the word *these*, than there is between the word *this* and *those*; and likewise that there is no greater affinity between *that* and *those*, than between *that* and *these*, is so obvious, as to require little illustration. *This*, denotes a single object, either at hand, or that has been just mentioned; and *that* a single object at some greater *distance*, as opposed to it; *these* and *those* both denote plurality at a distance, the one *more*, the other less *remote*, as contrasted with each other.

It is indeed true, that from a defect in the *English* dialect of our language, though not in the *Scottish* dialect, the word *these* is obliged to perform a double office, by denoting a plurality at *hand*, as well as at a distance, and therefore it becomes equivalent alike to *this* and *that*. But in the *Scottish* dialect that ambiguity is avoided. For,

*This* denotes a single object, and }  
*Thair* a plurality of objects } at hand, or very near.

*That* a single object, and }  
*These* pronounced *thae* a plurality of objects, } at a distance.

*Those*, in both cases, denoting another class of distant objects as contrasted with *these*, as in the following example.

“ *This* stone is heavy, (weighing or touching the stone,) but *that* stone, pointing to one at a distance, is more valuable. *Thair* apples (pointing to, or touching a quantity at hand) are sweet; but *these* are

more beautiful (pointing to another quantity at a distance,) though *those* are more numerous, pointing to another quantity at a greater distance.'

Observe, that these words, like all the definitives derived immediately from nouns, are obliged to perform the double office of definitives, and what we have called possessives. Thus we say, "*this* house is finer than *that*, or *that house*," either adding the noun defined, or suppressing it, as suits our fancy, exactly in the same way as we would say,

*James's house* is finer than *John's*, or *John's house*.

From the foregoing observations, we perceive, that the personal pronouns, in all European languages, both ancient and modern, are in many respects defective; and that many words have been called pronouns, which are not, in strict propriety, entitled to that name; and many others are forced to perform various offices, so nearly allied to each other in some cases, that they have not been distinguished, which has produced much confusion in our grammatical arrangements. We are enabled farther to perceive, that, in a language like the English, where every thing relating to the gender of nouns is denoted by the pronouns only, a few additions to this important class of words, would be productive of great energy, elegance, and perspicuity in that language.

## LETTERS FROM ISABELLA TO ALBERT.

### LETTER SECOND.

A THOUSAND, thousand thanks, my dear Albert, for your kind letter! O! if I could but hope that my

Letters could afford you the hundredth part of the pleasure yours give to me, I should write to you every day, and every hour that I could command. But what have I to communicate, save the childish prattle of one who knows nothing? You are good, very good, to be pleased with them. How flattering is it to me to be thus assured that I hold so near a place in your affections! for well I know it is that partiality alone which pleases.

You ask how I spend my time here. I conform exactly to the rules of the family in every respect. Our chief business is work; but we read a little, and play a little, and converse a great deal on what we have read. One of us, for I already reckon myself one of the family, acts the housewife week about. My turn, for the *first* time, is to be next week; and I promise myself much pleasure in the task;—for, though I am a novice, yet the servants here are all so obliging; and Mrs Drury, and my young companions are so cordially desirous of pleasing me, that I shall readily find advice whenever I am at a loss; and the hope of rendering myself of some importance will animate me. I shall be anxious to do better than they expect, without fear of being chid if I should be a little wrong; and I have often experienced that that kind of anxiety where hope predominates, is the most pleasing of all sensations.

Our parlour, through the whole day, looks very like a school room; Mrs D. is usually with us; and we are all as busy as can be, about one kind of work or other. No task is assigned to us; but, in

general, we stint ourselves to have such a thing finished by a certain time ; and we are as eager to accomplish that as possible. Mrs D. enters into conversation with us on every subject, and listens to our remarks on any book we are reading, or the incidents that occur, directing our judgement rather by mild hints than formal advices, wherever she sees us wrong. By this means her daughters have acquired a habit of thinking justly on most subjects, that others of their age seldom possefs. I feel this ; I feel my own wants when compared with them ; but by attention to what falls from either her or them, I hope, in my turn, to become wise enough to be able to make you be pleased with something else than the mere innocence of my prattle. That you may have some idea of the nature of this small female *cotterie*, (you know I learnt this word from yourself,) I shall endeavour to recollect some of our yesterday's conversation.

“ My dear,” said Mrs D. to me, with her usual gentleness and impressive manner, “ this house you will find is a very unfashionable place. Instead of gadding about through the whole country after amusement, you here find us continually at work, and busy from day to day, as if our sustenance depended on the labour of our hands. I dare say you are much surprised at this, though I am happy to see you fall into our way with much more ease than I could have expected. I shall be glad if you continue to do so ; for I am so pleased with your ingenuous candour and goodness of heart, that I begin to feel myself nearly as much interested in your wel-

fare as in that of my own daughters ; and were I not convinced that the acquiring a habit of industry at an early period of life, was of the utmost consequence to female happiness, believe me, I never should have bestowed half the pains about it I have done.

“ If we were all certain that we should die young, I should not have thought this a matter of great importance ; for at an early period of life our minds are so volatile and flighty,—there are so many new objects to attract our attention,—and nature has attached such power to the charms of youth,—and others are then so much disposed to bear with follies and impertinencies from us, as to make life pass very smoothly on at that period, even where no durable fund, or sources of amusement have been prepared. But when years steal on, the world will no longer tolerate girlish impertinencies ; the adulation which youth and beauty obtain, begins to subside ; and amusements of another sort become necessary even in the prime of life. But when old age approaches, a woman who has not accustomed herself to find amusement in work of one sort or other, becomes the most uncomfortable being imaginable. She is no longer able to partake in active amusements abroad ; she is deserted at home ; solitude becomes a burden she cannot support ; and she has scarcely an alternative left, but either to betake herself to the card table or the closet.”

I shuddered at this recital. “ You seem to be startled, my dear, at this shocking description ; but be not afraid, there is no necessity for being reduced

to this deplorable dilemma ; and I hope you will never experience that weariness which leads to it ; but you ought to observe how difficult it is to avoid it, unless it be by the help of that endless and innocent amusement, *work*. We all hope to be married one time or other ; and if so, in the natural course of things, a woman sometimes *must* be confined to the house, and always *ought* to take pleasure in home ; but if she has no resource for amusement, how can that be ? and without taking pleasure in female work, and domestic concerns, how can home be pleasing ?—A man has generally his business to attend. Few husbands can either afford to keep in their family idle persons to furnish amusement for their wives ; or if they could afford it, would they like to have them there ?—A woman, therefore, finds herself, soon after marriage, in a new situation, in which solitude, to a certain degree, must be experienced. If she has been in the custom of taking pleasure in work, she finds abundance of it to employ her ; and she has the satisfaction of contriving something new for the convenience of her family, without incurring unnecessary expence ; and often she has the pleasure of obliging her husband by presenting him with some little thing done by *her own hand*, as a mark of her attention to his convenience or taste. This is, in general, the surest means of procuring reciprocal attachment from him. You cannot, my dear, at your time of life, form an idea of the domestic pleasure that such trifling attentions produce." And here, my Albert, had you seen with what a gentle suffusion her eyes were filled on

this occasion, you would have been delighted.—“One attention begets another,—as one neglect is the fruitful source of many other disobliging acts of unkindness, which are the cause of much domestic misery.”

I could not help being struck with these remarks, which I found had not occurred to Mrs D. now for the first time; for her whole conduct discovers that she has been actuated on every occasion by these principles; and she is herself a living example of the justness of her own maxims. I tried to make some acknowledgements for her goodness, for speaking so kindly to me.—She smiled at my awkward efforts,—for my mind was so impressed with a conviction that she would perceive I had her own conduct in my eye, that I stammered, and hesitated at every word.—She hastened to relieve me.

“ You would surely like, my dear, to be beautiful,” said she in a more lively manner; “ and what would you give if I should teach you the secret of becoming so?” ‘ That would be a discovery indeed,’ said I, recovering myself. “ Believe me,” said she, “ it is not such a difficult thing as many persons imagine. I cannot indeed teach you how to acquire the nicest symmetry of features; or those delicate tints that produce universal admiration. These are gifts that bountiful nature alone can bestow; but there is a charm, superior far to any thing that these can give, that it is in the power of every young woman to acquire. But my dear,” said she, gently patting my head, as I sat in silent attention beside her, “ it is now time to walk;—go, my dears, and divert yourselves toge-

ther ; and when you are tired with play, and sit down again to work, I shall teach you the envied art of becoming beautiful ; and, let me tell you, it is not every one to whom I would communicate this important secret."

Such, my dear Albert, is the stile of our conversations while at work. I listen with the most anxious attention ; and not a word that charming woman utters is lost upon me. I have a thousand things to say ; but my paper is nearly filled ; though I have written the last part of it so small, that I wish you may be able to read it. I was going to entreat you to beseech my mother to let me stay here as long as I am to be from home ; and not to make me return any more to the boarding school. I had prepared a hundred reasons to induce you to be hearty in the cause ; but I have only room to mention the last, which, I know, will ever be the most powerful with you, and that is, that nothing could ever contribute so much to the happiness of your

ISABELLA.

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## ON POPULARITY.

SIR, *To the Editor of the Bee.*

THE admission into your useful miscellany, of the following observations, concerning the best means of obtaining the most substantial popularity, will oblige, at least, one of your readers.

Justice, like all other virtues, is amiable. A man, when treated with equity or justice, has no reason to expect more ; he is pleased, and rests contented : but generosity, when opportunity offers, or when ob-

jects occur proper for it, is still more amiable: how many pleasing effects it produces, both with respect to the persons who are its objects, and to their benefactor, it is impossible to enumerate or fully to describe. In the persons relieved, it creates much happiness, begets the warmest gratitude, and the most hearty attachment, and prompts them both by words and actions, to make their benefactor, when they can, suitable returns; and to the generous man, it yields the pleasing satisfaction of diffusing goodness, and of rendering a number of his fellow men happy. By dealing justly we leave no room for complaint; but by well timed generosity, we gain the hearts of men; and their favourable and affectionate report is an acquisition of great value, and highly pleasing to every ingenuous mind. For a righteous man, or for a man merely just, scarcely will one die, but peradventure for a good or generous man, some would even dare to die.

Men are made to feel not only for themselves, but also for their fellow men; thus they weep with them that weep, and rejoice with them who rejoice; they resent in various ways the injuries done to the helpless and innocent, as if done to themselves; and they feel an high degree of thankfulness for the good deeds done to their indigent brethren; and thus a tribute of affection and praise is paid to the beneficent man by all around him.

To maintain a social intercourse with our neighbours of the same rank, is no doubt proper; but it is to be remembered, that a true friend is not every where to be found,—that our visits at a distance

cannot be many, nor are these generally interesting. The world at large are but little acquainted with our real characters, nor are they much concerned to know them. It is in the domestic circle, within which we live, where our conduct is scrutinized, and daily viewed on every side,—that we are most thoroughly known; and when the opinion of our servants, of our dependants, and neighbours, within that circle, however narrow it may be, is, upon trial, or upon good ground, favourable, it diffuses its influence as the sun its light and heat, through the remoter parts of society: for the public almost invariably take their opinions, whether favourable or unfavourable, from domestic reports; therefore our families, and our immediate neighbourhood, merit our first attention.

The result then is, that those who would gain the public esteem, and the friendship of the worthy, must, in the first place, be just, and then generous, as their circumstances will permit. For the conduct of those must appear in a very unfavourable light; who affect to be generous, and yet neglect to pay their lawful debts; who expend large sums upon shows and entertainments, and leave their tradesmen's bills unpaid, and thereby expose their families to misery and want; and who, like the Pharisees, make a shew of liberality to the poor, but endeavour to refund themselves, by devouring widow's houses, and encroach upon the rights of their simple dependants: the candidates then for substantial fame, should, with an attentive, and an impartial eye, inquire, whether there are, by negligence or otherwise, any instances of in-

justice to be found, or any encroachments made upon the rights of others, within their department, and correct them without delay. The rich can defend themselves, but the poor have often no relief but in crying to God; and he will hear them. They complain too in private to the men of their own condition, and their voice is carried as upon wings, and makes, upon all ranks, the deepest impression. Promises should not be rashly made; because circumstances may occur which may render the performance difficult, or impracticable; but when they are made, and no valid objection afterwards arises, they ought to be performed. Promises convey a certain kind of right, and therefore raise expectations; a failure, then, or omission, in these cases, creates disappointment; and disappointment, resentment, and disgust, and complaints, and many disagreeable effects.

Considering how different the characters, and tempers, and opinions of men are, it will easily appear, that no man can act so as to please all. Whoever attempts this, attempts an impossibility. By varying his conduct like the wind, instead of gaining applause, he incurs the contempt and displeasure of all; whereas the man who obeys the dictates, and courts the approbation of his own well informed mind, is naturally led to act his part steadily and uniformly well; and bids fairer than men of a different character not only for the enjoyment of internal peace, but for obtaining the confidence, the approbation, and friendship of all the worthy and the good.

In a word, of his plan who would wish for substantial popularity, or durable fame, piety or reli-

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gion, must make an essential part. Excepting religion, all the other principles of human conduct, having for their objects things which daily change, must, like them, be subject to perpetual variations, and the conduct founded upon them, mutable and uncertain. Upon men thus unstable as water, what wise man can depend? Whereas the principle of religion, having God for its object, as he is unchangeable, must, in some degree, be immutable also; or to say the least, it is fixed and steady. Besides, religion, having for its object God, who is the supreme beauty, must render a man truly amiable. Whom do we wish for a companion or friend whom we can heartily love? or a counsellor upon whose integrity and faithfulness we can without suspicion depend? The man who fears God, and sets him continually before him.

Wherever piety is, it shows itself, not only by equity and beneficence to men, but by external acts of worship or devotion; where these then are wanting, we can neither love nor trust so much as we would wish. The conclusion of the whole is, that real piety is the finest ornament of the human character. I am, Sir,

Yours, &c.

AMICUS.

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SIR, *To the Editor of the Bee.*

IN your last Bee, I observe a reply from Mr Thunderproof, to my observations on his "remarks." Mr T. wisely avoids entering into any particular discussion of the subject, and contents himself with ma-

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king a few straggling criticisms, that hardly deserve  
any notice.

In the first place, Mr T. accuses me of misquoting him, and perverting his meaning, in that part of his "remarks," where he speaks of the pacific character of James I. I think it is evident, from the warm and enthusiastic manner in which he mentions the prolongation of this monarch's life, that he wished to connect with it the idea of peace and prosperity. Had he lived, Mr T. asserts, to the present time, this country would have been *now* in a state of prosperity, beyond the imagination or vanity of man to conceive. He indeed associates the "tranquillity of the country," with the life of James; but this I conceive to be a useless repetition, as the predicted prosperity could arise only from the pacific inclinations of this monarch; not surely from his talents for internal government or legislation.

Mr T's distinction betwixt "worst," and "most destructive," though curious enough, has not even the merit of a quibble or sophism. I did not say that he applied the superlative "worst," to the moral character of lord Chatham. This he acknowledges himself; and surely, in a political sense, the "worst minister," and the "most destructive minister," are synonymous terms.

I asserted that Mr T. called Sir Robert Walpole the best of ministers. He denies it, and says I am the first who ever said so. I beg leave to quote the paragraph whence I drew my conclusion. After calling lord C. "the most destructive minister that ever any nation was cursed with," he adds, "yet this

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man we prefer to Sir Robert Walpole, a statesman, whose maxim it was to keep us at peace with all the world." I leave to your readers to judge, whether, from this opposition, Mr T. did not consider Sir Robert Walpole's character as directly the reverse of Chatham's; whence it follows, as a necessary consequence, that since lord Chatham was the worst of ministers, Sir Robert must have been the best.

It is difficult to conceive what Mr T. would be at, when he talks of the madness "of the war system." Every friend to humanity must deplore the devastation and havock of war; but to conceive the idea of living in continual and universal peace, an idea very much talked of at present, is, I am afraid, one of those extravagancies into which mortals are at times apt to fall. It is an idea too exalted for our present system. Could we extinguish the guilty passions of ambition, revenge, avarice, superstition, envy, we might then enjoy the calm which Mr T. so much desires. But I leave to the philosophers to decide, whether, even in that case, mankind would inherit a much greater degree of happiness than we do at present: or whether the world would not resemble a standing pool, or dead, inactive mass, where virtue would disappear as well as vice; where there would be neither love nor hatred, hope nor fear, which, properly balanced, and mingled in the cup of life, form the true enjoyment of it. For my part I conceive the passions of mankind no less necessary to stir up and agitate the moral world, and to prevent a stagna-

tion, than the winds are to prevent a stagnation of the sea. I am respectfully, Sir,

Your most humble servant,

George's square, }  
Sept. 25. 1792. }

MISOBENTES.

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A SINGULAR PHENOMENON  
RESPECTING A CATERPILLAR.

SIR, *To the Editor of the Bee.*

THIS day, while another gentleman and I were paying our devoirs at the temple of a certain goddes ; we observed two or three caterpillars with something at the sides of two of them, of a yellowish colour ; which, upon a nearer inspection, we found to be a great number of cocoons of silk, differing only in size from those of the silk worm. On breaking one of these, a juicy substance came out. Being desirous of making further observations on these caterpillars, we brought into the house one with, and another without the cocoons. It was then about ten o'clock. In an hour and an half afterwards, we saw about eighteen living creatures making their way out of the last mentioned caterpillar, nearly about the middle of the body. They did not resemble the caterpillar in any respect ; being of a yellowish colour, pointed, and blackish towards the head, and without any feet. As soon as they had made their way out of the body, they immediately commenced spinning cocoons, similar to those about the other caterpillar. By five o'clock they had completed their work. During all this time the mother lay perfectly mo-

tionless. All this to us appeared so very surprising, knowing that all caterpillars first pass into the nymph or chrysalis state, and then become butterflies, at which period the eggs are deposited, that I determined to communicate to you what we had seen, in hopes that you, or if you think this letter worthy of insertion in your useful miscellany, some of your correspondents, would afford us some information on this subject. I am, Sir,

Your constant reader and admirer,

Edinburgh, }  
Sept. 23. 1792. }

JUVENIS.

P. S. It was my intention to send a drawing of the caterpillar; but I think it best to send one of them, the other I shall keep to make further observations.

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*Observations on the above.*

ALONG with the above letter was sent, in a box, a caterpillar, which is exactly delineated in the miscellaneous plate, fig. 7. p. 244, with two parcels of cocoons of a yellowish colour, as there represented; all of the natural size. The caterpillar was still alive on the 26th, but refused to eat. It continued to show signs of life for a day longer, when it finally expired. The cocoons remain till this time, October 14th, without any change.

Of all the works of nature none appear more surprising to the contemplative mind than the phenomena that respect reptiles and insects; two classes of animals extremely different in appearance, yet, in reality, connected with each other by the nearest relation. Among the reptile tribe there are three prin-

cipal divisions which are produced from the eggs of insects, each of which admit a great number of lesser varieties. These are caterpillars, grubs, and maggots. Nor is the interposition of providence more conspicuously apparent in any one instance, than in that unerring instinct that directs the parent fly to deposit its eggs upon such substances as are fitted to afford proper food for the young, as soon as they shall be produced. In general caterpillars are deposited on plants, grubs in the earth, and maggots in animal substances.

But though this rule be general, it is not universal. The gall insects, whose eggs produce a species of maggot, are always deposited on plants peculiar to each species. And though I do not at present recollect any animal of the caterpillar tribe that lives on animal substances, yet it is by no means impossible but there may be some of that kind. Whether the animals that issued from the body of these caterpillars were of this sort, or to what other class of reptiles they belong, remains to be ascertained. That they could not be the young of the caterpillar itself from which they issued, seems to be undeniable; as this would be a mode of procreation totally different from what is known to take place among that tribe of animals. From the observations of my correspondent, indeed, it does not seem to be of the caterpillar genus at all, as it wants feet; nor is the cocoon of the nature of that produced by caterpillars in general; for these are always made to envelope a chrysalis for a time; whereas, upon examining some of the small cocoons here alluded to, there is not the smallest appearance of a

chrysalis can be discovered. The outer envelope of these cocoons, is a substance in every respect resembling the outer part of a silk worm's cocoon, only the threads are much more tender, and in smaller quantity; for the greatest part of it consists of a ball containing an oblong bag, filled with a kind of thickish juice, more resembling an egg without a shell, than any thing to which I can liken it. What animal is to be produced from this egg I shall be glad to know.

It appears to me that the insect which ought to be produced from this species of cocoon, has deposited its eggs in the body of the caterpillar, which have there been hatched, like maggots in other animal substances, and which have subsisted on the caterpillar itself till the time of their transformation approached, when they have burst their confinement, and prepared for another state of existence; as is common with all animals of this kind.

The production of a silky web is by no means peculiar to the caterpillar genus. The web of a spider is well known; and several kinds of snails produce occasionally threads of great strength, which they have the power of availing themselves of for temporary uses; but I know not if any of these retain strength for any permanence of time. I was myself witness to the strength of a rope of this sort last summer, which occasioned to me no little surprise. The fact I shall here relate, to see if any of my readers can give any satisfactory elucidations on that subject.

*Phenomenon respecting snails.*

In a fine summer evening was discovered a large cluster of the common black snail, suspended from the branch of a tree, which was about six feet from the ground, by a strong shining transparentlike thread, of the size of a common packthread. At the time they were observed, this thread was fully three feet in length; the snails were entwined in one another; and, being then nearly dark, the precise number of them could not be ascertained; but it seemed there might be about five or six that were evidently working at the time; and we could see protruded from the under part of the cluster, a white substance, brighter than the thread above, which gradually lengthened. After standing for some time, and observing this operation, as well as the little light we had would permit, we went away for some time; and, on our return, it was evident the thread had been lengthened, as they were still in the same position, but nearer the ground. As it was now beginning to grow late, we left them; but in the morning no traces of the thread could be perceived. It was a large tree, with cavities in the trunk; and it seemed to me that the snails had taken that method of letting themselves down to the ground in the evening, that they might feed there through the night; and that they ascended the tree in the morning, to hide themselves through the day in their lurking holes; —but whether they re-ascended by their thread, and drew it up with them; or whether they crawled up the tree without it, I know not. There were evident traces, though slight, of snails upon the trunk of the tree. It is evident that snails can ascend upon

a tree ; but, perhaps, they have difficulty in descending. I never saw a snail in the act of descending, that I can recollect, though this may only have eluded remark.

Our knowledge of reptiles, and insects, is yet but inconsiderable ; and, though these objects appear trifling to the bulk of mankind, yet many are the benefits that might be derived to man from a perfect acquaintance with this subject. The larvæ of insects afford a delicious repast to many animals ; and, by what Dr Anderson states of the white lac in Bengal, (See vol. ix. p. 4, &c.) it would seem that some of these might be employed as food for man. At any rate, an exact knowledge of the insects that produce the eggs of various reptiles, which are highly destructive to man,—of the food they require,—the times of nidification,—the duration of life in their different states,—the circumstances that are favourable or noxious to them in their different stages,—the animals which seek them for food, &c. might be of the utmost utility ; as, by that knowledge, man might not only be able to free himself from the most noxious kinds ; but even occasionally to convert these to profit, by employing them as food for other animals, of whose labours he could avail himself. This is therefore a wide field for useful investigation, which ambitious youth will do well to cultivate.

LIFE, A SONG.

*For the Bee.*

SINCE life is a load we must bear,  
No more let us under it groan ;  
Keep us but a stranger to care,  
The world, as it pleases, may frown.

The cautions of that sullen sot,  
Incessantly tingle the ear,  
With, "O man ! consider thy lot,  
A title to hope and to fear."

We allow all this may be right,  
Yet experience, who guides me along,  
Is fam'd for true judgement, and sight,  
Besides an unprejudic'd tongue.

Experience o'er Care must prevail,  
Whose maxims the weightiest we find ;  
Though Care be for heaping his scale  
With scruples far lighter than wind

The courtier affects the gay place,  
The lover his pain would remove ;  
The one is preferr'd by his grace,  
The other succeeds in his love.

The courtier—what now ? has resign'd ;  
(Mere whispers those wretches disgrace)  
And Chloe discovers her mind  
Was not of a par with her face.

Dull mortals, why seek ye for bliss ?  
'Tis what ne'er will fall to your lot,  
Though the bottle, the purse, and the miss,  
Pretend they the secret have got.

Since the game that we play is in jest,  
At the cards no more anxious, I'll peep ;  
For should trumps hold me out to the last,  
Just nothing's the profit I reap.

## THE SECRET BLABBED.

*For the Bee.*

**S**YLVIUS, engag'd one day at dice,  
 Hist! hist! come hither John, he cries;  
 Then whispers close,—Run to Lucinda,  
 Make haste, be quick, you know the window—  
 Tell her I cannot come to day,  
 I'm very much engag'd at play;  
 But when you come to me again,  
 Be sure you say it was a man.  
 Yes, Sir, says John, away he flies,  
 Returns to Sylvius in a trice.  
 What says the gentleman? where is he?  
 Why Sir, he says he's wond'rous busy.  
 What was he doing when you came?  
 Why truly, Sir, I dare not name.  
 Tell, me or else,—Oh, Sir, I'll do it,  
 —A putting on his petticoat.

## EPIGRAM.

*For the Bee.*

**A**CORNISH vicar while he preach'd,  
 Of patient Job did speak;  
 When he came home found to his grief,  
 His cask had sprung a leak.

Enrag'd,—his wife did thus advise,  
 Job for a pattern chuse;  
 But he reply'd, Job ne'er had such  
 A tub of ale to lose.

## EPIGRAM.

*For the Bee.*

**A**NE epigram by school boy writ,  
 The pedant old surveys;  
 And as his wisdom thought most fit,  
 His stick across him lays.

The student felt his noddle bleed,  
 And mumbling, answer'd thus;  
 My epigram is bad indeed,  
 But your acro—stick's worse.

## NOTICES OF IMPROVEMENTS NOW GOING ON IN INDIA.

*Continued from p. 192.*

*Respecting the bread fruit tree.*

*From Alexander Macleod esq. to Dr James Anderson.*

DEAR SIR,

I ACCEPT with great pleasure the commission you have favoured me with, to enquire respecting the bread fruit tree. The inclosed extract of a letter to Dr Mein will shew you what steps I have taken to promote the inquiry. I shall also write to Coimbatore, on the subject, as it is said that the bread fruit tree grows in that district; but I did not see it in any part which I passed through in August last, and I went through very fine, and highly cultivated spots, near the hills, and returned through the center of the district. I am, &c.

*Dindigul, Feb. 5. 1792.*

" I have been favoured with a letter from Dr Anderson, in which he desires me to inform him if the bread fruit tree is to be found in or near this district. His letter is accompanied by copies of the two letters you wrote to him respecting the bread fruit tree near Tritchinopoly; but the description of it in your letters, though perfectly clear to me, will not I fear be sufficiently so for the natives, whom I shall employ in searching for it.

" I therefore take the liberty of requesting that you will employ some person to make a coloured drawing of its fruit, blossom, and leaf, of the natural size, and forward it to me by the tappal, together with a measurement of the general height of the tree, by the help of which I shall probably be able to give Dr Anderson a satisfactory answer to his inquiries."

*From Dr James Anderson to Alex. Macleod esq.*

DEAR SIR,

I AM truly sensible of your ready attention to my request of searching for the bread fruit tree, as the mode you have adopted will readily discover it.

Mr Lickie, who lately travelled through your part of the country in his journey from Europe, knew the tree in my garden at first sight, and tells me that he saw several of them in Mr Martin's plantation at Palamcottah.

The tree I have likewise heard say, grows on the island of Elmiferam, as well as at the fort of Palicatcherry, and that the streets of Cochin are planted with it; in which latter case I am sure Mr Powney will readily supply you with some plants for your garden.

I mention these circumstances as preparatory to the establishment of more extensive plantations of a tree that will afford subsistence, independent of the periodical rains, prove a means of counteracting monopolies of grain, and furnishing a reason for supporting the poor in times of scarcity, by employing them to repair tanks, wells, and choulteries at these times.—Two years ago Mr Alexander Anderson wrote me from Cochin, that he supped at a Dutch gentleman's upon bread fruit, which resembled the finest yam he had ever tasted. I am, &c.

Fort St George, Feb. 19. 1792.

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*From Robert Andrews esq. to Dr James Anderson.*

DEAR SIR,

THE nopal which you have been kind enough to send, arrived safe by yesterday's tappal. It was immediately planted, and I shall acquaint you hereafter if it thrives. I am happy to inform you that the silk worms are now multiplying very fast, and appear perfectly healthy,—from the first silk that I wind off, a sample will be forwarded to you, and I have to request you will point out any defects which may appear, that I may endeavour to rectify them.

I have been lately informed, that the bread fruit tree grows at Shevelipatore, where captain Dighton commands, and that the fruit thereof is eaten by the natives in that part of the country. I remain, &c.

Tritchinopoly, March 1. 1792.

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*From the same to the same.*

DEAR SIR,

I YESTERDAY received your second inclosure of the nopal, which has been planted.

I was this morning visiting the bread fruit trees at Allitory, and according to your directions set off several root from the old trees; but in walking about the garden

I discovered six young trees about half a foot high, which upon enquiry I found to be raised from seed, which the gardeners had sown some time ago.

As, by your correspondence, I find the tree in your garden, was last month in flower, you will be well pleased at the above information, and the ease with which the tree may be propagated,—and by your writing to Mr Powney at Travancore, I have no doubt but you might obtain any quantity of the seed you wish. I remain, &c.

Tritchinopoly. March 2. 1792.

### A PROVIDENTIAL DELIVERANCE.

THE following account of the interposition of divine providence, in faveur of a widow and her family, near Dordrecht, in the province of Holland, is copied from the Leyden gazette. This industrious woman was left by her husband, who was an eminent carpenter, a comfortable house, and some land, and two boats for carrying merchandise and passengers on the canals. She was also supposed to be worth above ten thousand guilders in ready money, which she employed in an hempen and sail-cloth manufactory, as the means not only of increasing her fortune, but of instructing her children, (a son and two daughters) in those useful branches of business. One night, about nine o'clock, when the workmen were gone home, a person dressed in uniform, with a musket and broad sword, came to her house, and requested lodging: "I let no lodgings, friend," said the widow, "and besides, I have no spare bed, unless you sleep with my son, which I think very improper, being a perfect stranger to us all." The soldier then shewed a discharge from Diesbach's regiment, (signed by the major, who gave him an excellent character,) and a passport from comte de Maillebois, governor of Breda. The widow believing the stranger to be an honest man, as he really was, call

ed her son, and asked him, if he would accommodate a veteran, who had served the republic thirty years with reputation, with a part of his bed. The young man consented, and the soldier was hospitably entertained, and withdrew to rest. Some hours after, a loud thumping was heard at the street door, which roused the soldier, who stole softly down stairs, and listened in the hall. The blows were repeated, and the door almost broken through by a sledge, or some heavy instrument. By this time the affrighted widow and her daughters were running about and screaming, murder! murder! but the son having joined the soldier, with a case of loaded pistols, and the latter screwing on his bayonet, and fresh priming his piece, which was well filled with slugs, desired the women to retire, as bloody work might be expected in a few minutes. Soon after the door was burst in, and two fellows entered, and were instantly shot by the son, who discharged both his pistols at once. Two more returned the favour from without, but without effect; and the intrepid veteran, taking immediate advantage of the discharge of their arms, rushing on them like a lion, ran one through the body with his bayonet, and whilst the other was running away, lodged the contents of his piece between his shoulders, and he dropped dead on the spot. They then closed the door as well as they could; reloaded their arms; made a good fire; and watched till daylight, when a number of weavers and spinners came to resume their employment; we may guess their horror and surprise on seeing four men dead on a dunghill, where the soldier had dragged them before the door was shut. The burgomaster and his syndic attended, and took the depositions of the family relative to this affair. The bodies were buried in a cross road, and a stone erected over the grave, with this inscription: "here lie the wretched carcasses of four unknown russians, who deservedly lost their lives, in an attempt to rob and murder a worthy wo-

man and her family. A stranger who slept in the house, to which divine providence undoubtedly directed him, was the principal instrument in preventing the perpetration of such horrid designs, which justly entitles him to a lasting memorial, and the thanks of the public. John Adrian de Vries, a discharged soldier, from the regiment of Diesbach, a native of Middleburgh in Zealand, and upwards of seventy years old, was the David who slew two of these Goliaths ; the rest being killed by the son of the family. *In honorem, et gratitudinis ergo, Dei optimi maximi pietatis et innocentiae summi, protectoris,—magistratus et concilium civitatis Dordrechiensis hoc signum ponit curavere xx. die Nov. annoque salutaris humani, 1785.*" The widow presented the soldier with an hundred guineas, and the city settled an handsome pension on him for the rest of his life.

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#### INDIAN MAGNANIMITY.

AN Indian, who had not met with his usual success in hunting, wandered down to a plantation among the back settlements in Virginia, and seeing a planter at his door, asked for a morsel of bread, for he was very hungry. The planter bid him begone, for he would give him none. "Will you give me then a cup of your beer?" said the Indian. "No, you shall have none here," replied the planter. "But I am very faint," said the savage, "will you give me only a draught of cold water?" "Get you gone you Indian dog, you shall have nothing here," said the planter. It happened, some months after, that the planter went on a shooting party up into the woods, where, intent upon his game, he missed his company, and lost his way ; and night coming on, he wandered through the forest, till he espied an Indian wigwam. He approached the savage's habitation,

and asked him to shew him the way to a plantation on that side of the country. "It is too late for you to go there this evening Sir," said the Indian; "but if you will accept of my homely fare, you are welcome." He then offered him some venison, and such other refreshment as his store afforded; and having laid some bear skins for his bed, he desired that he would repose himself for the night, and he would awaken him early in the morning, and conduct him on his way. Accordingly in the morning they set off, and the Indian led him out of the forest, and put him in the road he was to go; but just as they were taking leave, he stepped before the planter, then turning round, and staring full in his face, bid him say whether he recollects his features. The planter was now struck with shame and horror, when he beheld, in his kind protector, the Indian whom he had so harshly treated. He confessed that he knew him, and was full of excuses for his brutal behaviour; to which the Indian only replied: "When you see poor Indians fainting for a cup of cold water, don't say again, 'Get you gone, you Indian dog!' The Indian then wished him well on his journey, and left him. It is not difficult to say, which of these two had the best claim to the name of a Christian.

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A PICTURE OF THE COURT, DRAWN FROM THE LIFE,  
BY AN ABLE PAINTER.

THERE, every one obeys that he may command; they cringe that they may exalt themselves: at every instant they change parts;—every one is protected and protector;—every one receives vain promises, and gives others as vain in the same moment. It would seem that no person dies in that region; for in a moment every one is forgotten,—every one is re-

placed, without the smallest appearance of any change. This is the abode of envy and of hope; while the one torments, the other consoles, and gives birth to agreeable chimeras. Death seizes the inhabitants in the midst of hopes that have been disappointed for twenty years,—in the midst of projects which would demand another life. Those who do not know this country, believe it to be a place filled with delights; those who inhabit it, speak ill of it, but cannot leave it.

Serve the prince, said a wise man to his son, in his embassies, in his armies, but never at court, whatever place, or whatever appointments are assigned to you.

A courtier said, one day to one of his old college companions, who was a labourer: Wherefore do you not learn to please? you would then be no longer obliged to live by the labour of your hands. And why, answered the other, do you not learn to work? you would no longer be obliged to be a slave.

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*On ambition.*

The best of all good things, says M. Retz, is repose. All the pleasures which nature can bestow, become insipid to him who is agitated by ambition, who is tormented by vanity, or torn by envy. You shall see a man on whom fortune has been prodigal of her choicest favours, to whom nature has given a sound and vigorous body; who is beloved by his wife, and his children, whom he cherishes; whose presence spreads pleasure and joy in his family, where he is only an apparition; who, if he lived on his own domains, would enjoy the pleasure of doing good to a set of numerous vassals, but he there makes his appearance only three or four times in a year; and is then scarcely seen till he is gone again. This man does not feel the value of health; he does not enjoy his

fortune. His life, which might flow on in that kind of animated leisure, which results from the exercise of acts of beneficence, is consumed in agitation and in fear. Independent by his riches, he devotes himself to servitude, and is tormented by chagreen. His sleep, which ought to be pleasing, is troubled by envy and disquietude. He writes, he cringes, he solicits, he tears himself from pleasure, and gives himself up to occupations that are not suited to his taste ; he in a measure refuses to live during forty years of his life, in order that he may obtain employment, dignities, marks of distinction, which, when he obtains them he cannot enjoy.

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#### PLAN OF SWITZERLAND IN RELIEF.

IN the city of Lucerne in Switzerland is to be seen one of the greatest curiosities of its kind in Europe ;—a plan, in relief, of the countries adjacent to that lake so justly famed in Helvetic story. This surprising work, which discovers alike the patriotic spirit and unsurmountable perseverance of the undertaker, is carried on at the sole expence of general Pfiffer who has been busied about it upwards of twelve years, and still continues to augment it from day to day. In the mean time he allows strangers access to see it with the utmost politeness.

One there perceives, with surprise, the proportional height and form of the rocks ; the declivity of the mountains ; the kind of trees which grow there, according to the soil and the elevation ; the direction of the roads and of the paths ; the course of the rivers which divide the plains, the vallies, and the mountains are all marked. The sinuosities of the rivulets, and the falls in cascades ; the position of the lakes, cities, burghs, villages, and castles,

that of single houses, are all observable, even to the crosses placed along the road, and the form of the houses.

This map in relief, comprehends sixty square leagues, and includes the cantons of Uri, Switz, Undervald, and part of the cantons of Lucerne, Zug, and Berne. All the objects are coloured; it occupies a space of twelve feet long by nine feet and a half broad, and the lake of Lucerne has been taken for the center of the plan.

The substance of it is a composition of pitch and wax, except the mountains, for which stone has been employed.

#### TO CORRESPONDENTS.

THE Editor agrees in opinion with *one of the friends of the people*, though he doubts if the mode of writing he has adopted be the best calculated for effecting the end he has in view. On that account he will deliberate before he resolves to insert that paper.

The facts respecting the viper, which have been received from several hands, shall be communicated to our readers in due time.

The communication by a *young observer*, is received, and shall have its turn.

*Tackstrotte's* communication on the same subject is also received, and shall be delayed till he has had an opportunity of seeing the former; as it will tend to supersede some of his remarks.

The favour of *J. L.* is received.

The hints of *A. M. M.* shall be duly adverted to.

Thanks to *R. W.* for his short article. Authentic facts respecting natural history, or the progress of the human mind, that are not generally known, are always acceptable.

*G. B.* deserves thanks for his elaborate essay. It might be improved, if it were considerably abridged. Should the writer attempt it, he will find it a profitable task in his beginning exercises in composition.

Thanks to *C. C.* for his obliging attention.

The traveller by *E. G.* is thankfully received. A continuation will be very acceptable.

The communications by *Ein Leibhaber*, are come to hand.—His farther correspondence is requested.—The Editor feels more sensibly than he can do, the disappointment he has received by a breach of compact with a correspondent in Germany, who undertook in the most liberal manner; but has performed nothing. There is no bringing such culprits to punishment, except by holding them up to detestation to the public; and this the Editor has been sometimes tempted to do *nominatim*; but he believes silent contempt is the more manly procedure. The Editor regrets the expence of postage; writing small on large paper would greatly diminish this. It might perhaps be farther diminished did the Editor know his particular address. The book is not translated.

The poem *Liberty Ball*, is written with ease and spirit; but it is too incorrect for publication; and, in some places, the expressions are rather harsh. The Editor remarks with surprise, some corrections that were found in the Bee box, seemingly in the same hand writing, which appear to be of an opposite tendency to the rest of the poem; of these the following is a specimen.

Now the period's come at last,  
Freedom sounds her final blast;  
Anarchy, and defamation,  
Are the fruits of usurpation.

Hence! ye shameless base usurpers!  
Of both faith and truth corrupters:  
Misrule's the bane of liberty!  
Who scorn the laws can ne'er be free.

The Editor suspects that some wag who has seen the verses, has chosen this method to travestie them. Whatever opinion he may form of the above, he is happy to agree with this corrector in the following stanza.

May the British constitution,  
Save us from a revolution;  
And still secure us peace and rest,  
Without one grievance unredrest!

From these specimens the writer will see, that the corrections accord so little with the general tenor of the first edition, that the Editor does not choose to intermeddle in it; though the following lines, which are a very favourable specimen of the writer's composition, give a liberty he never wishes to exercise; because he does not consider himself qualified for the task; nor, if he were, would he choose to exercise it.

Cut and carve, or throw away;  
If encourag'd, Sir, you may  
Hear again another day,  
From your friend and liberty,  
Truth, and right, and equity.  
Grace and growing to the Bee;  
Sir, your servant, frank and free.

#### PLAIN ENGLISH.

To hear from this correspondent, with equal ease and spirit as above, on any subject not connected with politics, will give the Editor pleasure. But, as he wishes to keep all his readers in good humour if he can, he is desirous of avoiding subjects of a political nature at present. There are too few persons who can have the philanthropy of uncle Toby,—to bid the poor annoying insect go quietly about its business; for, though the world is wide enough for us all, to allow others to indulge their whims without being disturbed by them; yet there are many persons of such an irritable disposition, that they cannot be kept at rest, when others are buzzing around and teasing them; so that, like Don Quixote, they get themselves into a passion,—attack sheep, and puppet shows, and wind mills, as they come in their way; and after having occasioned much mischief to others, come off at last with broken bones themselves.—The Editor wishes to avoid these fruitless squabbles.

THE BEE,  
 OR  
 LITERARY WEEKLY INTELLIGENCER,  
 FOR  
 WEDNESDAY, OCTOBER 31. 1792.



THE POLAR, OR GREAT WHITE BEAR.

NATURE hath bountifully decreed, that no part of the surface of the earth should be destitute of animals. Some are endowed with the faculty of bearing, without annoyance, a heat that would roast the greater

part of animals which inhabit the earth ; while others delight so much in cold, that they are only to be found in those regions where frost and ice eternally abound. To some, the sandy desert, alone, is found to supply their wants ; while others can only exist in swamps and marshy bogs. The water, itself, and air, and every thing we touch or handle, is full of life.

Among the quadrupeds of the coldest regions, the polar bear is the most conspicuous, not only for its size, but for its amazing strength, agility, and ferocity. In size it greatly exceeds all other animals of the bear tribe, being sometimes found to measure thirteen feet in length. Its limbs are of great thickness and strength ; its hair long, harsh and disagreeable to the touch, and of a yellowish white colour ; and it has the singular peculiarity of being naturally disposed into tufts, very much resembling the manner in which a brush is made ; its ears are short and rounded ; its muzzle long and sharpish ; and its teeth large.

It has seldom been seen farther south than Newfoundland ; but abounds chiefly on the shores of Hudson's Bay and Greenland, on one side, and Spitzbergen and Nova Zembla on the other.

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“There, the shapeless bear,  
With dangling ice all horrid, stalks forlorn.  
Slow-pac'd, and sourer as the storms increase,  
He makes his bed beneath th' inclement drift,  
And, with stern patience, scorning weak complaint,  
Hardens his heart against assailing want.”

During summer, they take up their residence on large islands of ice, and frequently pass from one to

another. They swim well, and can go the distance of six or seven leagues: they will dive; but cannot continue long under water. When the pieces of ice are detached by strong winds or currents, the bears allow themselves to be carried along with them; and as they cannot regain the land, or abandon the ice on which they are embarked, they often perish at sea. But should a ship come near them, instigated by hunger, and naturally fearless, they will boldly board it, and resolutely seize and devour the first animal they meet with. On these occasions, neither fire, nor noise, nor any kind of threats, will stop it in its progress; nor can any thing but the death of the animal, itself, save the crew from its rapacious gripe; for it will follow them up the shrouds, and along the yards, wherever these are sufficiently strong to bear its weight.

Sometimes bears are thus driven upon the coast of Norway, almost famished for hunger by their long voyage; but as soon as the natives discover one of them, they arm themselves, and presently dispatch him. Its flesh is white, and it is said to eat like mutton. The fat is melted for train oil; and that of the feet is used in medicine.

The white bear brings forth two young at a time. Notwithstanding their savage appearance, and natural ferocity, their fondness for their offspring is so great, that they will die rather than desert them\*. Wounds serve only to make the attachment more violent: they embrace their cubs to the last, and bewail them with the most piteous cries.

\* See a remarkable instance of this sort, *Bee*, vol. vii. p. 90.

They feed on fish, seals, and the carcases of whales. Attracted by the scent of seals flesh, they often break into the huts of the Greenlanders. They sometimes attack the morse, with which they have terrible conflicts; but the large teeth of that animal, give it a decided superiority over the bear, which is generally worsted.

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AN ESSAY SHOWING HOW TASTE EXALTS THE PLEASURES OF RURAL LIFE. BY THE AUTHOR OF THE ESSAY ON THE INFLUENCE OF TASTE.

SIR, *To the Editor of the Bee.*

SOME time ago I had a letter from an acquaintance of mine, who has been long resident at a distance from the metropolis, in the quiet retirement of the country, and mixing but little in the busy bustling haunts of pleasure or ambition in the capital.

This letter is so full of the effects of that taste and discernment which I have endeavoured to explain and promote, that I cannot refuse myself the gratification of at least attempting to find a place for it in your elegant miscellany. I am, Sir, your humble servant,

B. A.

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MY DEAR SIR,

London, Sept. 1. 1792.

You will be surprised to receive a letter from me dated at this place, which is now a desert, from the general emigration of the beau monde to Bath, Buxton, Tunbridge, Cheltenham, Harrowgate, Scarborough, Weymouth, Brightelmstone, Margate,

and every supposable place of amusement in the kingdom, except to the truly useful and interesting places of their rural abode.

For my own part, I have been here but for a few days, to sell some stock in the three *per cents*, to invest in the country, and shall soon turn my back upon sin and sea coal, and taste again as soon as possible, the chaste and delightful emotions that accompany the *mibi me redditis*. It is really astonishing to observe the fatuity of people of landed estate, who, as if they were universally planet-struck, under the sign of the waterman, seem to have no other idea of summer amusement, but in water-bibbing at these scenes of *nastiness and dissipation*. I can easily divine, indeed, the cause of some men flying with their families from London, like hunted stags, that they may escape their followers, by plunging into the deep, like dolphins in the wake of sinking mariners: but by what witchcraft families of reputation, and independent fortune, are induced to forsake the delightful and profitable scenes of their rural residence, I should have been altogether unable even to guess, had I not myself experienced in the beginning of my life, the cause of this miserable perversion of sense and sentiment, in the want of a system of rational pursuit. Having been originally educated on the *automaton* plan of fashionable life, I was forced (though an excellent *repeater*, and even provided with an extensive *barrel* of the most excellent *chimes*,) to go every now and then to a watering place, to get myself *wound up*, and made to go till my *paces* were run down again; a dependance which

at length grew intolerable to me, and put me at last upon trying fairly to *wind up* myself, which, by God's blessing, and the strength of my understanding, I was at last enabled to accomplish.

Now, in the midst of so many notable discoveries, relating to machinery, that are daily published for the gratification of the public, and the benefit of trade and manufactures, it may be no ungrateful communication for me to make to you, as my friend, that I have ascertained the *primum mobile* of a man of fashion to be fire, and not water.

These falls of water at the various places of public resort, which I have mentioned, make men and women *go*, but they cannot *wind them up*, which I found to my fatal experience; but after a certain desiccation of the human frame, after having been drenched in mineral waters, with the constant dissipation which goes on after the humefaction, a coldness ensues, which probably arises from the effects of *evaporation*. But action and re-action, being equal and contrary, as has been observed by the great Sir Isaac Newton, a hot fit succeeds, and if no water, or redundancy of any liquid whatsoever, takes place, *then*, and in that case, an elastic flame is kindled, and the *regular paces* are resumed, and return into their due situations; *which was the thing to be demonstrated.*

Among your multifarious communications, directed towards the improvement of your country, I should be sorry to deny you the advantage of this accidental but important discovery of your old and faithful friend; and I give you my free permission to make it generally known to the people, in whatever

method you shall think most persuasive and effectual.

I have now the heartfelt satisfaction of seeing my wife and children going regularly and profitably by fire, and not by water ; and though the original discoverer of this astonishing *ressort interieur*, for moving the human mind, I am so far from thinking of applying for a patent to secure the profit of the invention to myself and family, that I shall put this letter into the post office, without a pang of regret at having let the secret out of my possession. I cannot help however expecting that the parliament of England, who have given my old acquaintance and eleve, William Forsythe, three thousand pounds, for a mixture of cow dung and old rubbish, to restore fruit trees to their bearing, may be induced, on a proper application, to give me a reward for a mixture of common sense and dear bought experience, to restore country places, and country gentlemen, to their proper bearing, without any ablation, incision, or disturbance whatsoever.

I hope to get down to the country next week, to see my wheat put into the ground, and to attend our approaching meeting for our new inland navigation, when I shall send you a more particular account than I have done hitherto, of my experiments relating to the fertilization of land by leguminous crops, and the economy of manure by the drill : in the mean time I must tell you an ingenious plan my wife has fallen upon, to promote the happiness of the lower sort of people in this neighbourhood.

She has caused to be printed and circulated, a set of recipes for comfortable daily fare, in wholesome savoury food, prepared from cheap materials, two or three to chuse out of, for each day of the week.

She has therein accurately described the methods of making excellent pottages of potatoes, seasoned with herrings, or with soy; which last condimentary liquor she has contrived to prepare from our own leguminous plants, of carrots, of onions, of pease, of coleworts, of cabbages, of lettuces, of beets, and of turnips.

She has shewn them the method of rendering their houses comfortable by means of flues, or little portable stoves, and has added a number of little useful remarks, relating to the prevention of disease, by cleanliness, temperance, the use of ales, and nourishing liquors, instead of ardent spirits; and concluded the whole with some plain and pertinent advices on the subject of morals, and the education of children; not without some excellent hints relating to industry and general economy. While thus employed it is surprising to see the progress she has made in gardening, and the knowledge of garden crops cultivated in the field; and by attention to the habits and wants of the people, is as fit to write a good statistical account of the parish and country as any clergyman in Scotland.

While my help mate is thus virtuously employed, in riding her little pad about the doors, I am scouring the fields on my charger of a hobby horse, and smoaking along the roads, to look at bridges, and various objects of rural police, when I can find lei-

The other day when I had come home from a fatiguing excursion, and was not in the best humour in the world, my wife took up the *Seasons of Lambert*, and by way of comforting me, read me the following passage from them, with which I shall conclude this Alexandrian epistle.

" Heureux ! qui loin du monde, utile à sa patrie,  
 " Y fait naître des biens, en respecte les loix,  
 " Et derobant sa tête au fardeau des emplois,  
 " Aimé dans son domaine, inconnu de ses maîtres,  
 " Habite le donjon qu'habitoient ses ancêtres !  
 " De l'amour des honneurs il n'est point devoré.  
 " Sans craindre le grand jour, content d'être ignoré,  
 " Aux vains dieux du public il laisse leur statues,  
 " Par l'envie et le tems si souvent abattues ;  
 " Il ne s'égare point dans ces vastes projets  
 " Qui tourmentent le cœur incertain du succès ;  
 " Il ne peut être en butte à ces revers funestes,  
 " Qui souvent de la vie empoisonnent les restes ;  
 " Elever les troupeaux, embellir son jardin,  
 " Plutôt que l'aggrandir fecondir son terrain,  
 " Par sa seule industrie augmenter sa richesse,  
 " Voilà tous les projets que forme sa sagesse ;  
 " Il ne veut qu'arriver au terme de ses jours,  
 " Par un chemin facile, et qu'il suivra toujours.  
 " La Chine, et le Japon, l'ajouille et la peinture,  
 " N'orment point ses lambris d'une vaine parure ;  
 " On y voit les portraits de ses sages aïeux,  
 " Ils vecurent sans faste, il veut vivre comme eux,  
 " Il regarde souvent ces images si chères,  
 " Qui parlent à son cœur des vertus de ses pères.



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TO THE MEMORY  
OF  
ROBERT ADAM, ARCHITECT,  
OF A RESPECTABLE FAMILY,

Long remarkable for producing worthy and useful citizens ;  
And which in him and his surviving brother,

JAMES,

HAS EXHIBITED A FINE TASTE IN ARCHITECTURE,

Compressed and limited by the defect of it in these Kingdoms, which would not permit Them to exercise, in its full extent, that noble idea of simplicity and grandeur of Composition which appear in their original designs,

THESE SLIGHT OBSERVATIONS AND HINTS ON TASTE,

ARE DEDICATED BY THE AUTHOR.

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## THE EFFECTS OF WATER ON MACHINERY.

HINTS ON THE BEST WAY OF APPLYING WATER TO MACHINERY AS A MOVING POWER, IN A LEVEL COUNTRY, WHERE NO KIND OF CASCADES IS TO BE MET WITH.

*Continued from p. 257.*

In the foregoing part of this essay it has been shown, that plain float-boards can never be employed with economy on wheels that are to be moved by water, *where a considerable fall can be commanded*. But the case is reversed in a *level country*; for it is upon plain float-boards, alone, that water can be made to act as a power, for the moving of machinery, where advantage is meant to be taken of the gentle flow of a current without falls.

The enlarging the breadth of the wheel has also been condemned, as rather hurtful than beneficial,

where a fall of water can be commanded. But in a flat country this rule also is reversed; for where the current is gentle, it is a rule without exception, that the broader the wheel is, or in other words, the longer the float-boards are, with the greater force will the water act upon machinery as a moving power.

In all cases of this kind, also, the wheel, for obvious reasons, ought to be made of as large a diameter as can be conveniently done.

In short the float-boards ought to be of such a length as to go across the whole breadth of the stream; and were it ten, twenty, or thirty feet in breadth, the wheel ought to be of the same breadth, having supports for the axle at each side of the river.

Where the breadth of the wheel is very great, it will be obvious that there ought to be two, three, or more wheels fixed upon the same axle, all of the same diameter, for the purpose of fixing the float-boards, and keeping them firm in every part.

Wherever water is found to move forward with a progressive motion, it descends from a higher to a lower situation, by reason of the pressure of its own weight always tending towards the lowest place. The greater, therefore, the inclination is of the surface over which it flows, the greater will be its rapidity; and, in proportion to the quantity of water moving forward, will be its strength, when moving with the same degree of velocity.

While water is thus moving, if any object be laid across the stream, it will either stop the current, so as to form a dam, or it will be carried down the stream

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with the same degree of velocity, nearly, that the water itself, moves. If, therefore, the float-board of a mill wheel that is moveable upon its center, be laid across a river, so as to prevent the water from passing, it will operate as a dam, till the water behind shall rise to such a height, as, by its pressure upon the upper side of the float-board, it shall overcome the whole resistance made by the machinery. Wherever this happens, the float-board will be forced to give way and suffer the water to pass; the succeeding float-board will be made to yield in its turn; and so on, till a rotatory motion be given to the wheel, that must continue as long as the water shall continue to flow with the same degree of force.

The principle on which machinery might be turned in these circumstances, is so excessively clear, that many persons will be surprised it never has been carried into practice in this country; but when we advert that the power of water, where the fall is considerable, is so much greater than where its motion is less rapid; we will not be surprised that mankind should have *first* thought of constructing machinery only where a considerable fall could be obtained; and, when these mills came to be generally used, and the mode of managing water in these circumstances familiar to every body, it would occur at the first glance, that a large body of water, moving slowly, could not be managed with ease *in the same way*; and of course little attention to sluggish streams, as a moving power, would be given. The difficulties which would thus present themselves, on a superficial view of the subject, might thus appear to be insurmountable, when

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they were in fact so easily to be obviated, as scarcely to deserve the name of obstructions at all; as will, I trust, appear from what follows.

The principal reasons why no attempts have been made to construct mills on this plan, are the following:

1<sup>st</sup>, Were a mill to be placed upon the main body of the stream, or river, there could be no way of guarding against the effects of inundations, by means of sluices, as at present, which turn off as much of the water into another channel, as shall be at any time superfluous; nor could the flow of the water towards the wheel be entirely prevented when the machinery is meant to be stopped.

To obviate both these difficulties, it would only, however, be required to raise the supports on which the gudgeons of the wheel rest at either end, to such a height as to overtop the wheel; and to make these gudgeons be received into an eye, fixed in a piece of wood, that admitted of being raised upwards at pleasure, in grooves provided in the cheeks for that purpose. From each of these boxes let a chain be carried upwards, and passed over a round axle, placed at a sufficient height above the wheel; on one end of which let there be fixed a wheel with spokes, like the wheel of a crane, by means of which, the water wheel might be raised entirely out of the water, whenever it should be wanted to stop the mill, either on account of a flood or otherwise \*.

\* As I do not mean here to explain *particulars*, but merely to develop *principles*, it is unnecessary to trouble the reader with a detail of the mode in which this might be effected, which could not be rend-

2d, A second inconvenience would arise from the increased rapidity of the current during land floods, which would, on these occasions, augment its power so much, as to make the wheel go with an inconvenient degree of velocity; while the wheel would at the same time, by interrupting the current, raise the water behind it to an inconvenient height.

The last of these evils would be entirely removed, by lifting the wheel so far up, by the forementioned contrivance, as to allow the water to pass free below it. By the same means, its power upon the wheel could be moderated, by letting only a small part of the float-board dip into the water\*. If, however, this contrivance alone should not be found to answer the purpose altogether, many other contrivances, simple enough, might easily be adopted to moderate the rapidity of the current at this place, which it is unnecessary here to enumerate.

Were mills on this principle erected on all the streams that easily admit of it in Britain, machinery, turned by water, might be introduced into many parts of the country, that have been hitherto deemed incapable of any thing of that sort. In rivers that flow through countries which are comparatively flat, this species of mills would answer better than in the rivers that flow through mountainous countries; because these rivers are not so subject to sudden and intelligible to ordinary readers, without many figures. To those who are acquainted with mechanics the above hints will be perfectly sufficient.

\* It is scarcely necessary to observe, that this elevation could occasion no arrangement to the machinery of the mill, provided an upright spoked trundie of sufficient length, were employed for catching the teeth of the inner wheel.

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and violent floods as a mountain stream ; and consequently the machinery could be regulated with less trouble. In mountainous countries, however, there is less necessity for adopting this contrivance, as falls of water can there be commanded ; but even in hilly countries, the streams that issue from lakes, of a large size, are peculiarly proper for this purpose, as being less liable to sudden inundations than other streams.—The *Leven*, from loch Lomond to Dumbarton,—the *Awe*, from loch Awe in Argyleshire to loch Etive,—the *Lochy*, and the *Ness* in Inverness-shire, are large rivers of this kind, on which an infinite number of mills might be erected. On such large streams as these, one wheel might always serve two mills ; one on each side the river. A number of lesser streams are to be found in every part of the country, on which mills of this kind might be erected, on a scale more suited to the general ideas entertained on that subject at present, than these would be ; for till enterprises of this sort shall become more familiar than they now are, those first mentioned would appear too gigantic undertakings for man to atchieve. How long will it be before man shall come to know the full extent of human powers !

Upon this principle, water, as a moving power, might be commanded in many parts of Scotland, to such an extent, as, comparatively speaking, might be called infinite ; and possessing advantages for turning machinery, that cannot be commanded to an equal degree, perhaps, in any other part of the world. But as mankind are apt to be startled, when things that they have been accustomed to look upon as impossible, are proposed, I shall not for the present advance

farther in this line of disquisition, reserving what farther might be said on this subject till another occasion.

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## HINTS ON THE GENERATION OF THE VIPER.

The following extracts respecting the natural history of the viper, have been transmitted to the Editor by a correspondent to whom he lies under very particular obligations for this and many former favours.

*Extracts from Mr. White's natural history of Selborne, published 1789, relative to the viper.*

*To Mr. Pennant.*

" PROVIDENCE has been so indulgent to us, as to allow of but one venomous reptile of the serpent kind in these kingdoms, and that is the viper. As you propose the good of mankind, to be an object of your publications, you will not omit to mention common salad oil, as a sovereign remedy against the bite of a viper. As to the blind worm, (*anguis fragilis*, so called, because it snaps asunder with a small blow,) I have found upon examination that it is perfectly innocuous. A neighbouring yoeman (to whom I am indebted for some good hints,) killed and opened a female viper about the 27th of May: he found her filled with a chain of eleven eggs, about the size of those of a blackbird; but none of them were advanced so far towards a state of maturity, as to contain any rudiment of young. Though they are oviparous, they are viviparous also, hatching their young within their bellies, and then bringing them forth: whereas snakes lay chains of eggs every summer in my

melon beds, in spite of all that my people can do to prevent them ; which eggs do not hatch till the spring following, as I have often experienced. Several intelligent folks assure me, that they have seen the viper open her mouth, and admit her helpless young down her throat on sudden surprises, just as the female opossum does her brood into the pouch under her belly, upon the like emergencies ; and yet the London viper catchers insist upon it, to Mr Barrington, that no such thing ever happens. The serpent kind eat, I believe, but once in a year ; or rather but only just at one season of the year. Country people talk much of a water snake ; but I am pretty sure without any reason ; for the common snake (*coluber natrix*) delights much to sport in water, perhaps with a view to procure frogs and other food."

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To the honourable Daines Barrington, esq.

DEAR SIR,

" In August 4. 1775, we surprised a large viper, which seemed very heavy and bloated, as it lay in the grass, basking in the sun. When we came to cut it up, we found that the abdomen was crowded with young, fifteen in number ; the shortest of which measured full seven inches ; and were about the size of full grown earth worms. This little fry issued into the world with the true viper spirit about them, showing great alertness as soon as disengaged from the belly of the dam. They twisted, and wriggled about, and set themselves up, and gaped very wide when touched with a stick, shewing manifest tokens of menace and defiance, though as yet they had

no manner of fangs that we could find, even with the help of our glasses. To a thinking mind, nothing is more wonderful than the early instinct which impresses young animals with the notion of the situation of their natural weapons, and of using them properly in their own defence, even before those weapons subsist, or are formed. Thus a young cock will spur at his adversary before his spurs are grown ; and a calf or a lamb will push with their heads, before their horns are sprouted. In the same manner did these young adders attempt to bite before their fangs were in being. The dam, however, was furnished with very formidable ones, which we lifted up, (for they fold down when not used,) and cut them off with the point of our scissars. There was little room to suppose that this brood had ever been in the open air before ; and that they were taken in at the mouth of the dam, when she perceived the danger was approaching ; because then, probably, we should have found them somewhere in the neck, and not in the abdomen."

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*Extracts from Pennant's British zoology, respecting the viper.*

" They conceive a perfect egg within ; but bring forth their young alive.

" Providence is extremely kind in making this species far from prolific ; we having never heard of more than eleven eggs being found in one viper ; and those are as if chained together, and each about the size of a blackbird's egg.

" They copulate in May, and are supposed to be about three months before they bring forth.

“ They are said not to arrive at their full growth in less than six or seven years ; but they are capable of engendering at two or three.

“ The viper is capable of supporting very long abstinence ; it being known, that some have been kept in a box six months without food, yet did not abate of their vivacity. They feed only a small part of the year ; but never during their confinement ; for if mice, their favourite diet, should at that time be thrown into their box, though they will kill, yet they will never eat them. Their poison decreases in violence, in proportion to the length of their confinement.

“ These animals when at liberty, remain torpid throughout the winter ; yet, when confined, have never been observed to take their animal repose.

“ The viper catchers are frequently bitten by them in pursuit of their business ; yet we very rarely hear of the bite being fatal. The remedy, if applied in time, is very certain ; and nothing else but sallad oil, which the viper catchers seldom go without. The *axungia viperina*, or the fat of vipers, is also another. Dr Mead suspects the efficacy of this last, and substitutes one of his own in its place ; but we had rather trust to vulgar receipts, which perpetual trials have shewn to be infallible.

“ The ancient Britains had a strange superstition in respect to these animals ; of which there still remains in Wales a strong tradition\*.”

\* See Pliny, book 39, chap. iii.

From another correspondent I have been favoured with the following fact, which perfectly corresponds with the foregoing remarks.

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SIR,

*To the Editor of the Bee.*

"AN acquaintance of mine who lives in the Highlands of this county, had been telling me, some time ago, that he had killed a serpent which had young ones in it ; but as I did not recollect the particulars of his story, I sent for him since I read G. R. H's paper, and he is now here : he says, That as he was one day returning home, he saw a viper among the heath, which he struck with his hand staff, and carried home half dead upon the same : that upon coming near his house, he threw it down, and struck it with a spade, and divided it into two ; upon which there sprung out a number of small creatures, very lively and nimble, which were undoubtedly the young of that viper. He says he continued looking at them till they had travelled a considerable distance, (by no means stuck together) and then he killed them, for fear that they might escape and live. The old one was about twenty inches long, of a blackish colour, with ugly yellow streaks ; the young ones were all of a blackish colour, about five inches long, of the thickness of a packthread ; the head considerably larger than the rest. He is not quite sure as to their number ; but is very certain it did not exceed twelve. If nothing more satisfactory has come to hand, from any other quarter, concerning the viper, the above may be agreeable to

many of your readers, and may be depended upon as truth. I am, Sir, your most humble servant,

Sutherland, }  
Sept. 24. 1792. }

TH. R\*.

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## MORAL REFLECTIONS BY MIRA.

*For the Bee.*

THERE is a gentleness even in the enjoyment of the country, which seems to charm, without engrossing the mind ; and to breathe over it a grateful calmness, more approaching to the happiness of the Divinity, in proportion as it appears less a sensation of pleasure in ourselves, than a mild and celestial inclination of diffusing it to others. Even the very breezes seem fraught with benevolence and purity, as they blow over the landscape, brightening every beauty, without even crushing the humblest ; and diffusing to mortal bosoms, a harmony not unlike that of their native heaven ! Enthusiastic as this description may seem, it is not merely visionary, since happier days have frequently realized it : nor did I then ever see the setting sun, with all those glorious scenes which succeed his departure of a summer evening, without feeling myself at once more sensible of the blessings of this life, and more worthy of those of the next. There have indeed occurred whole weeks, in which I might say, with Hamlet, " It

\* The phenomenon described in the letter of G. R. H. p. 5. still remains to be explained. When any person shall observe one of a similar nature, it will be obliging to communicate it to the Editor.

goes so heavily with my disposition, that this goodly frame, the earth, seems to me a sterl promontory. This most excellent canopy, the air,—this brave o-verhanging firmament,—this majestical roof, fretted with golden fires,—Why? it appears to me only a foul and pestilent congregation of vapours! But the mind, however warped, cannot, if naturally good, fail to be restored by a creation so similar: and I have long since been convinced, that if integrity is not happiness, it is the only thing that can supply its place.

I wander here in search of health; and feel the blessed sun warm at my bosom; or turning to the breeze, fancy I once more inhale strength and happiness. Yet it is not instantaneously the exhausted heart can resume its capacity for happiness: fears have been so long its predominant expression, that joy, even sometimes involuntary, borrows that lan-guage.

The cause remov'd, habitual griefs remain,  
And the soul saddens with the use of pain.

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Love, invigorating power! thou who canst alone revive the heart, withered by worldly cares and mental struggles! through every tie do I look up to thee with gratitude! whether tremulating from the soft lisplings of infancy, the tender cautions of age, or the more dangerous and tumultuous accents breathed from less matured feelings: Still in a well go-verned mind art thou the source of good!—humbling its vanities, correcting its selfishness, bidding

it taste the blessing of bestowing happiness ; and, finally, the sweet reward of receiving it.

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Happy that child to whom esteem descends as an inheritance ! who comes into the world the beloved of many hearts ! Whose virtues are supported by example, encouraged by emulation, and who receives, in the name of those from whom she sprung, the pledge of their being respected ! Allow me to take more than a nominal interest in an offspring so precious ; and teach her early to think she has found a second mother in the sincere and affectionate aunt.

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However desirable the various advantages or pleasures of life may at different periods of it be, it is from its rational and social duties alone we must derive our truest felicity ; nor are we ever so unfortunate as in being depressed beneath, or so guilty, as in supposing ourselves elevated above them.

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The human mind, created for, and accustomed to action, only languishes in a gloomy inertity without it.

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Man, though born with the vigorous and marking virtues which distinguish his career through life, frequently suffers the humbler ones that most constitute its happiness, to be crushed by education and custom. These, it is the part of woman to preserve ; and while from his example she acquires candour, stability, and fortitude, she must inculcate by her own, the no less useful qualifications of gentleness, and self denial.

## PARTICULARS RESPECTING SARDINIA.

SIR, *To the Editor of the Bee.*

### *Kites.*

CETTI, in his natural history of Sardinia, informs us, that a peasant of that country cannot easily be persuaded to shoot a kite, as he firmly believes that his gun will be useless ever after, or that his wife will die within a year.

### *Locusts.*

That, in 1769, the locusts had so multiplied upon the island, as to darken the air in their flight, and desolate whole fields. They even infested people in their houses, and spread a general alarm. The crows, at last, were observed to fly against them in troops, and made such a havock among the winged clouds, that they soon disappeared.

### *Asses.*

The same author observes, the Sardinian asses do not in general exceed two feet ten inches in height. Perhaps they may have dwindled from not being sufficiently crossed, or from the constant drudgery to which they are subjected. The water in the towns and villages, owing to some cause that has never been properly ascertained, is seldom drinkable. A great many of these dwarfish asses are therefore constantly employed in bringing that necessary article of life from the neighbouring fields.—The grinding machines are almost all driven by this small breed, in so much, that in the Sardinian dialect, *macinatore*, and *asinello* are synonymous terms. I am, Sir, your humble servant, and constant reader,

R. W.

THE GHOST OF RENTONHALL ;  
OR A TALE OF OTHER TIMES.

*For the Bee.*

I

“ WEEP, Ellen, till your eyes run dry,  
“ Your valiant lover's slain ;  
“ From tilt and tournament he'll ne'er  
“ A conq'ror come again.”  
“ Ah ! is he gone ? the flow'r of youth !  
“ And did you see him fall ?  
“ Yes, and around his grave doth fleet  
“ The ghost of Rentonhall.

II

“ When Percy with his hostile bands  
“ Did sack fair Tweeda's dale,  
“ Young Renton fought, till all his foes  
“ In heaps around him fell.  
“ Now he is dead and many a swain  
“ Lamenteth for his fall ;  
“ Dim are his eyes, and o'er him screams  
“ The ghost of Rentonhall.”

III

“ His face was like the noon-day sun  
“ In majesty so fair ;  
“ And as fine burnish'd threads of gold  
“ Did hang his yellow hair.  
“ His shape was like the mountain pine,  
“ So graceful and so tall ;  
“ I'll go and mourn o'er him, nor fear  
“ The ghost of Rentonhall.

IV

“ His rising fame inflam'd the court,  
“ That base and venal train,  
“ And they did vow, with one consent,  
“ To have him sudden slain.  
“ 'Tis tortuous envy that has made  
“ My valiant lover fall,  
“ And laid him in the shade, where stalks  
“ The ghost of Rentonhall.

V

Dark was the hour ; the midnight moon  
Had hid her silver beam ;  
And through the woods, as Ellen went,  
The birds of prey did scream ;

Till sweet as e'er a syren lay,  
 On passengers did call,  
 Fair Ellen's name was echoed by  
 The ghost of Rentonhall.

VI

Sweet Ellen shook in every limb,  
 She reeled to and fro ;  
 So shakes the lily's slender stem  
 When risen breezes blow :  
 Light grew her head, her breast did beat,  
 She totter'd to her fall,  
 But found herself supported by  
 The ghost of Rentonhall.

VII

“ O gentle Ellen know the voice  
 “ To which you listen'd have ;  
 “ No phantom I, nor sheeted ghost,  
 “ Come from a midnight grave,  
 “ I chose this method to elude  
 “ Malicious en'mies all,  
 “ My bands are arm'd, nor longer I'm  
 “ The ghost of Rentonhall.

VIII

He died unto king Robert's court \*,  
 Who punished with pain,  
 The guileful band, who had contriv'd  
 To have the hero slain.  
 He shone an ornament to kings,  
 In fight or splendid ball,  
 And Ellen long and happy bless'd  
 The ghost of Rentonhall.

Tweedside,  
 Sept. 24. 1792.

A. L.

## TO LOVE.

ALL powerful love ! dance o'er the scene,  
 And cheer our hearts with joy serene ;  
 Steal on my soul thou soothing pow'r,  
 And shed refinement's heav'nly balm ;  
 Make soft the winter's hoary hour,  
 That robs us of the summer's calm :  
 Then sweet delight we will inhale  
 Though snelly snows drift o'er our vale.

† Robert II. of Scotland.

## ANECDOTE.

THE baron of Hægi was a gentleman of the territory of Vinterthur in Switzerland; he was possessed of several fiefs, and had his castle near the city. This gentleman, who lived about the year 1300, made agriculture his ordinary occupation. His plough was drawn by fine horses. His son, who was a handsome young man, drove them with the whip in his hand, while the father, with grey hairs, opened the bosom of the earth, and traced the furrows. A duke of Austria, going on horseback from Rapperschweill to Vinterthur, was surprised at the distinguished air of the labourers, and the beauty of their horses. He stopped, and turning towards the grand master of his household: I have never seen, said he, so handsome peasants, and horses so well fed, labour the fields. Do not be surprised at it, my lord, replied that officer; these are the baron Hægi and his son. There is the ancient castle of their family, at the foot of the hill; and if you doubt it, you may convince yourself of it to-morrow; when you will see them come and offer you their services. In fact, the next day, the baron of Hægi, accompanied by seven of his people, all on horseback, came to Vinterthur to pay his respects to the duke, who did not fail to ask him if it was him he had seen the day before, following a plough superbly equipped. Yes, my lord, replied the baron with dignity; after a war for the defence of one's country, I think there is no occupation more worthy of a gentleman than that of cultivating his own lands, and I give the example of it to my son. The duke could not but admire the old man; he gave him the most flattering reception, and loaded his son with caresses. The ancients had the same idea of agriculture; *omnium rerum ex quibus aliquid exqueritur, nihil est agricultura melius, uberioris, homine libero dignius.*

## REMARKABLE TREES.

[Extracted from Sir John Sinclair's statistical account of Scotland.]

*Ash tree in the parish of Bowhill.*

THE ash tree in the church yard of Bowhill, deserves a particular description, being no less remarkable for its uncommon size, than for its extensive spreading, and the regularity of its branches. The trunk is nine feet in length; the girt, immediately above the surface of the ground, is twenty-five feet; and about three feet above the surface, it measures nineteen feet and a half; and, at the narrowest part, eighteen feet. It divides into three great branches; the girt of the largest is eleven feet; of the second, ten; and of the third, nine feet two inches. The branches hang down to within a few feet of the ground, and, from the extremity of the branches on the one side, to that of those on the other, it measures no less than ninety-four feet.

*Another.*

There is another large ash tree in the parish, though it is greatly decayed, only the trunk, and part of some of the branches remaining. The trunk is about eleven feet in length; the girt immediately above the surface of the ground, is thirty-three feet; at the narrowest part it measures nineteen feet ten inches. The proprietor has lately fitted up a room in the inside of it, with benches around, and three glass windows.

The diameter of the room is eight feet five inches, and from ten to eleven feet high.

*Parish of Deskford, county of Banff.*

In an orchard adjoining to an ancient castle there is particularly an ash tree, which measures in girt twenty-four feet five inches and a half. It is called St John's tree, from its vicinity to a chapel of that name. There is a-

nother ash tree in the same orchard, which measures in girt twelve feet three inches and a half, having a shank twenty feet high, of nearly the same dimensions ; this ash is called young St John.

*Holly tree in the same parish.*

There is also a holly, perhaps the largest of its species in this country. It measures, at the distance of two feet from the ground, eight feet four inches and a half in girt. In several places of the parish, hedges have been planted ; and they also thrive amazingly when they receive proper care and attention.

*Yew tree in the parish of Ormiston in East Lothian.*

In lord Hopeton's garden at Ormistonhall there is a remarkable yew tree. Its trunk is eleven feet in circumference, and twenty-five feet in length ; the diameter of the ground overspread by its branches, is fifty-three feet ; and there is about the twentieth part of an English acre covered by it. This tree is still growing in full vigour, without the least symptom of decay in any of its branches, which increase yearly in length about an inch. There is no tradition that can be depended upon for exactly ascertaining its age ; but from the best information it cannot be under two hundred years old. It seems rather more probable to be between three and four hundred years old.

A CHARADE WRITTEN BY THE RIGHT HONOURABLE

CHARLES JAMES FOX, ADDRESSED TO LADY SPENCER,

*Communicated by a respectable correspondent.*

PERMIT me to intrude for once, uncalled, into your ladyship's presence, and, by dividing myself, add greatly to my consequence. So exalted am I in the character of my

first, that I have trampled on the pride of kings, and the greatest potentates of the earth have bowed down to me ; yet the dirtiest kennel in the dirtiest street is not too foul to have me for its inmate : in my *second* what an infinite variety ! I am rich as the eastern monarch, yet poor as the weeping object of your benevolence ; I am mild and gentle as the spring, yet cruel and savage as the wintry blast. I dare pronounce myself from the ablest, your ladyship's superior, though few are the instances that prove it, and ten thousand are the proofs against it. I am young, blooming, and beautiful ; yet old, deformed, and wretched. I am,—but your ladyship is tired, or wishes my re-union,—it is done, and my consequence is lost. And I have no merit left but that of remaining, as before, your ladyship's very obedient servant.

*A solution of the above is requested.*

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#### QUERIES RESPECTING FRUIT TREES.

SIR, *To the Editor of the Bee.*

It would be doing me and many of your readers a particular favour, if you, or any of your ingenious correspondents, would furnish an answer to the following queries :

What is the most effectual way of preventing young fruit trees running too much to wood ? What is the best method of forcing (in the natural ground,) fruit trees to bear early ?

It is a pleasant thing, Mr Editor, to reap the fruits of our own labour. I wish to do so ; and sincerely hope you will those of your very useful and entertaining miscellany. I am your

*Old M——m.*  
20th July 1792. }

**CONSTANT READER** \*.

\* The Editor wishes it were in his power to give satisfactory answers to those queries ; all he knows of the matter is, that some kinds of fruit trees naturally begin to bear at a much more early period of their life than other kinds ; and that whatever tends to make them grow very lux

## NEW DISCOVERIES.

The following three discoveries were transmitted to the Editor by a gentleman who had purchased them at a considerable price, who now publishes them for the benefit of the public.

*First, The artificial manure.*

For every acre take,

		L.	s.	d.
Dregs of lamp or train oil, eight gallons, 1b.				
about	-	60	0	12 0
Plaister of Paris,	-	20	0	1 0
Nitre,	-	16	0	10 8
Common salt,	-	16	0	1 10
		L.	1	5 6

*Directions.*

POWDER the nitre, mix the salt and plaster of Paris with it. Take sixteen bushels of dry light earth, lay some of it half a foot thick, then sprinkle on plenty of the mixture. Lay another inch of earth, then more of the mixture; and so on, alternately, till the whole is laid together. Turn it, and mix it. Lay the top flat, but with a little ridge all round the edges, and then pour on the oil, so as to cover the whole top. After lying a week, let it be turned and well mixed; after another week turn and mix it again; and again at the end of the third week. It is then fit for use.

uriantly rather retards their fruiting. On this principle, much pruning is in general pernicious; and over luxuriance of soil will, on many occasions, retard the commencement of fruiting; but where the soil is not rich, though the trees may bear sooner, they will not afterwards yield near so much fruit as if they be nourished better.

A man who wishes to have fruit soon, ought to pick out the kind of trees that come soon into bearing, which a skilful nurseryman ought to know. These should be interspersed with other good sorts that will come in time to yield fruit.

A proper quantity for every field may be made on the spot; and it is best to cover it; because, if dry, it may be sown by the hand.

The dregs of oil, in large quantities, may be had at fifteenpence a gallon, or even perhaps less. The plaster of Paris is 6s. or 6s. 6d. per Cwt.

When the manure is used, it is to be thinly applied at sowing time, and the seed and manure harrowed in together.

### Second.

The addition to the above for dry lands, is 4lbs of pearl ashes, which may be mixed with the gypsum and salts.

### Third, *The remedy for the rot in sheep.*

Boil one pound of oak bark, and half a pound of hawthorn leaves, in sixteen quarts of soft water, till half the liquid is consumed; when cold pour off the clear liquor, and add 100 drops of spirit of sea salt to every quart.

Give each sheep half an English pint every other morning.

B. PIKE.

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### TO OUR READERS.

SOME late numbers of the Bee have contained a greater proportion of philosophical matter than will probably be agreeable to many of the readers. This was occasioned by a desire to finish the subjects in the same volume in which they are commenced, which the Editor always wishes to do, where it seems to be practicable.

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As there are now considerable arrears due for this work, especially by persons at a distance, the Editor requests the favour of his subscribers, to make remittances when opportunities offer. The sums due by each individual must appear very trifling to them; but when many small sums are added together, the amount becomes considerable, and of some consequence to the Editor. Few will imagine that the arrears due on this work, could be already greatly above a thousand pounds.

## SHORT CHRONICLE OF EVENTS.

Sept. 19. 1792.

### FOREIGN.

#### *France.*

Since the memorable tenth of August last, affairs in France have been in such a state of anarchy, that it is difficult for us in our small limits to give even an idea of their proceedings. It is impossible to give an abstract of them; for the transactions are of such a nature as cannot be comprehended without a special detail of particular facts, many of which are of such an atrocious nature as cannot be recounted without horror, nor could be believed were they not authenticated by such concurrent testimonies as prevents the possibility of doubting. All we can do, after giving a short general review of things, is to state a few of the most remarkable facts that have there taken place within the last fortnight.

The national assembly ever since the suspension of the king, has been only a name without real authority. It is the mere echo of the Jacobin club; its decrees are issued on

the requisition of any individual who shall choose to demand them, without hesitation or deliberation of any sort; they are of course disregarded, and every man who has the voice of the people for the day, may set these decrees at defiance with the utmost impunity. The generals of the armies are displaced and replaced again, perhaps several times in the course of a week; and their authority even while they have the sanction of the national assembly is just as long as those under them choose to submit to it, and no longer. La Fayette has effected his escape; Dillon, no one can say whether he has any command or not; Luckner is displaced; Dumourier is the only general in command who has had the singular good fortune to remain for a whole month without being accused or suspected.

But of all the transactions that stain this woeful period of the history of man, the massacre of the prisoners on the second of Septem-

ber, and the butcheries that followed it are most horribly transcendent. Whether it is possible for human nature to attain a higher pitch of barbarity seems to be at present doubtful ; but when men have power to act without fear of restraint from the laws, it is impossible to say what they will do.

Longwy and Verdun are taken by the Prussians, with some places of smaller note. Before the capture of Verdun the progress of the duke of Brunswick seems to have claimed but little attention at Paris, but that event excited an alarm of the most serious nature. Whether that alarm will have any other tendency than to excite confusion, and pave the way for greater havoc and destruction, is very doubtful. The following are a few of the most remarkable transactions in the order they occurred since our last.

The king, queen, and royal family remained from the 10th to 14th of August under the protection of the national assembly, when after many deliberations about the proper mode of proceeding with regard to him, it was decreed that delegates should be sent from all the districts of the nation, to form a tribunal for their trial, and that they should meet for that purpose at Paris on the 20th September.

Where the royal prisoners

were to be confined till their trial, was the next object of discussion ; and it was at length agreed that they should be confined in a building called the *temple*, to which they were conducted on the 14th ; strong entrenchments were ordered to be thrown up around it in order to make it as secure as possible.

Aug. 17. M. Herault de Schelles, in the name of the Committee of Legislation, presented the plan of a decree for establishing a tribunal to try those accused of criminal proceedings 'on the 10th of August. This plan was adopted.

The assembly having then decreed *urgency*, decreed as follows :

I. An electoral body shall be immediately formed to appoint the members of a criminal tribunal to try those accused of having committed crimes on the 10th of August, as well as other criminals who may have had any concern in the late tumults.

II. This tribunal shall be composed of eight judges, eight *suppleants*, two public accusers, four registers, eight clerks, and two national commissioners named by the *provisionary executive power*.

III. The functions of the judges, public accusers, and national commissioners, as well as those of the directors of the juries, of which mention shall be made hereafter, shall be the same as those of the judges of the criminal tribunal, the director of the jury, public accuser, and king's commissioner, settled by the law passed respecting juries on the 29th of September 1791. The judges shall pass a definitive sentence, not subject to be reversed by any other tribunal whatever.

There are some other clauses of less consequence which are omitted for want of room.

Aug. 19. Some soldiers of the army of M. la Fayette being admitted to the bar, informed the assembly, that they were obliged to make their escape thro' a wood to avoid being seduced by their chiefs, and that they had *come to Paris* to learn the truth respecting the events of the 10th. They said that M. Veneur had written to the battalions in the name of M. la Fayette to the following purport :

" Soldiers ! your constitution has been annihilated ! Sedition has filled the measures of their crimes. They have caused the Swiss soldiers, and the commandant of the national guards, to be assassinated. With swords in their hands, they have compelled the legislative body to decree the suspension of the king. Soldiers ! choose between the King and Petion."

They added that M. la Fayette wished to make them sign a paper written in the same strain, and requested that the assembly would prevent the perfidious designs of this general.

M. Merlin presented fifty different pieces to support this accusation.

Two letters, and in particular one from the commissioners sent to the army, being addu-

ced, to corroborate these charges, the assembly immediately passed the following decree of accusation against M. la Fayette :

i. It appears to this assembly that there is just ground for accusation against M. la Fayette, heretofore commander of the army of the north.

ii. The executive power shall, in the most expeditious manner possible, put the present decree into execution ; and all constituent authorities, all citizens, and all soldiers, are hereby enjoined, by every means in their power, to secure his person.

iii. The assembly forbids the army of the north any longer to acknowledge him as general, or to obey his orders ; and strictly enjoins that no person whatsoever shall furnish any thing for the troops, or pay any money for their use, but by the orders of M. Dumourier.

M. Dillon has retracted his orders, and implicitly yields to the new order of things.

Sunday Aug. 19.—Evening. An address to the army of the north, in the form of a proclamation, was voted, to inform the troops of the nature and causes of the events of the 10th instant, and prevent them from being misled by false suggestions.

Several complaints were received against the conduct of general Dillon, and the decree

that he had lost the confidence of the nation, and ought to be superseded by the executive council, was renewed.

Aug. 21. M. Servan, the minister at war, announced that M. la Fayette, with his staff-officers, had emigrated on the night between the 19th and 20th.

Aug. 23. The minister of war notified, that Luckner and Dillon had been deprived of their command, as neither of them seemed much disposed to fight for the new order of things. Mareschal Luckner, in a letter to the minister, said, "I cannot conceive the motives of the assembly's conduct towards M. la Fayette, — he swore fidelity to the nation, the law, and the king. I took the same oath in the face of all France." — The minister added, that Mareschal Luckner had been succeeded in his command by general Kellerman.

Aug. 24. M. Benvistrod moved, that all the priests who ought to have taken the oath required by the law of Dec. 20. 1790, as well as those who, not being subject to the oath of public functionaries, ought to have taken the civic oath prescribed by the law of September 3. 1791, and who have not yet taken their oaths, shall be transported out of the kingdom.

Aug. 25. The discussion concerning the refractory priests being resumed, several mem-

bers opposed the decree passed yesterday.

After a long debate, the assembly decreed, "that if the refractory priests did not quit the kingdom in fifteen days, they should be transported to Guiana in South America.

M. de la Port, intendant of the civil list, was tried on the 22d, between one and two o'clock. He was condemned to be beheaded, and the sentence was executed the same evening in the *Place du Carrousel*.

We have just received intelligence here that the Ottoman Porte has forbidden all ships under French colours to enter the Turkish harbours.

Aug. 26. M. Jean de Brie presented the following proposal for destroying the kings and generals who are now fighting against the liberty of France. He requested permission to raise a body of 1200 volunteers, who shall bind themselves by an oath to go and attack individually and collectively, and by every possible means, the kings and generals now at war with France. These tyrannicides to be called (*les Douze Cents*) "The twelve hundred," to be armed with poignards and pistols.

This plan was decreed, and the assembly were going to settle the pay of these desperadoes, when Mess. Verniant,

Masuriar, and Sers, requested that it might be sent to a committee for reconsideration, as such a measure would induce the enemies to make reprisals, and consequently give rise to a war of the most horrid kind.

After a long debate, the plan was referred to a committee.

Aug. 29. A letter from the ambassador to the Helvetic diét, stated that the Swiss were incensed at the accounts received of the proceedings of the 10th, and that nothing was heard among them but exclamations of vengeance. The ambassador complained of the delays in transmitting to him the necessary sums of money. Ordered that the executive power forward the money to the ambassador, and that the diplomatic committee examine whether or not the ambassador should be ordered to come away, after declaring to the diet that it was the firm intention of France to maintain all her treaties to the Swiss.

*Approach of the duke of Brunswick.*

Sept. 2. The president announced that two commissioners from the community of Paris requested to be admitted to the bar on pressing business. Leave being granted, one of them addressed the assembly as follows:

"The council of the community, afflicted with the dan-

gers of their country, come to deliberate on the measures necessary to be taken in the present awful and alarming crisis. It has been decreed that the tocsin shall immediately be rung; the alarm guns fired, and that commissioners shall be dispatched to collect all those patriotic citizens who may be desirous of marching to the frontiers. The following proclamation has been issued:

"Citizens, the enemy is at the gates of the capital. Verdun is besieged. It cannot hold out longer than eight days. Citizens, let us repair to-day to the Champ de Mars; let an army of 60,000 men be immediately formed; and let us march towards the enemy."

"The community of Paris has decreed that their operations shall be laid before the national assembly, because they consider it as the rallying point of all good Frenchmen."

This speech was followed with reiterated applauses, and the commissioners were invited to the honour of the sitting.

Paris, Sept. 4.

The news came that a body of 4000 French, which had been detached by Dumourier for Verdun, had, by treachery also, been led into ambuscade, and cut in pieces. This raised the fury of the populace to its height. "We have no one to

trust to," they exclaimed; "we are to be butchered like sheep, and shall we not turn upon our hunters? We must face them; but shall we, on quitting our wives and children, leave them to the traitors who are now in prison? Can we go with confidence to meet the enemy, and leave traitors in existence behind us?" "A l'Abbaye! aux Carmes!—let us cut the throat of every traitor!" Such was the horrid proposition made in assembly of the Federates in the hall of the Jacobins! Such were the exclamations of the furies that crowded the streets! The people flew to the convent of the Carmelites, where the refractory priests of Paris were confined, and without mercy the cardinal du Rochefoucault, and about one hundred and thirty priests, were massacred. From this they hurried to the Abbaye, where every man and woman confined under suspicion of crimes against the nation was also murdered.

Paris, September 6. M. R. Hulieres and the abbé Bardy were the first persons murdered at the *Hôtel de la force*, and the abbes Lenfant, Chapt de Rastigiac, and Fontenay at the Carmes.—M. St Meort, accused of writing in the *journal de la Cour*, was after the mock trial, acquitted and carried home. The massacre of prisoners at the *Hôtel de la Force*

continued all yesterday. M. d'Affry, the father was also pronounced innocent.

We are happy also to say, that all the ladies of the queen, except madam de Lamballe, were saved.

The unfortunate Lamballe, after undergoing a long examination, was beheaded, her head put on a pike, and, eternal infamy on the wretches! her body was dragged through Paris for three or four hours. That she was the foremost in this conspiracy, it is impossible to deny—that she has been indeed one of the chief instruments of the court in all its crimes; it is vain to conceal—but she was now rendered incapable of doing more mischief; and if her beauty had no influence on those barbarians, her sex surely should have shielded her from their vengeance.

M. Lenfant had been acquitted, and was actually out of the goal when the mob found out his real name, and he was pursued, brought back, and murdered. M. Mailly, a major general, was claimed by the commissioners as a carpenter, but he was found out and instantly stabbed.

The abbe Solomon du Veyrier, late secretary, Guillaume, the notary, and several other prisoners, were saved by means of the commissioners.

#### ANOTHER MASSACRE.

Paris, Sept. 10. Another

horrid scene has been transacted by the populace. On-Saturday last, at three o'clock in the afternoon, the prisoners from Orleans arrived at Versailles, with an escort of 2000 men and six pieces of cannon. When they reached the Place d'Armes, the people appeared in great numbers, and by their gestures and threats indicated their determined resolution to commit some outrage.

Their fury, however, was for some time restrained; but when the prisoners, who amounted to fifty-four in number, arrived at the gate de l'Orangerie, the people rushed upon the guards, overpowered them by their numbers, tore from them the unhappy victims, whom they in vain attempted to protect, and abandoning themselves to the frenzy of their political enthusiasm, butchered the whole of them except two.

These ungovernable wretches not contented with committing this atrocious act of barbarity, proceeded to all the prisons of Versailles, and gratified their infernal vengeance, by destroying every suspected person whom they found in them. We as yet know not the number of the victims.

#### *Miscellaneous.*

The duke regent of Stockholm has eluded the demand of Russia for the succours stipulated in the treaty of alliance, by al-

leging that they cannot be granted without the consent of the four orders of the kingdom, and that by the will of the late king, these orders cannot be convoked till the young king shall be declared of age.

#### *M. LA FAYETTE.*

When this general, and the officers who accompanied him, were stopped by the Austrian party, after they had quitted France, they remonstrated with the commandant against the injustice of considering them as prisoners, seeing they were simply passing as travellers with a view to get into some neutral country. Since then M. la Fayette has published the following declaration on this subject.

The under-signed French citizens (to the number of twenty two), prevented by an imperious concourse of circumstances from enjoying the happiness of serving, as they have always done, the liberty of their country; being no longer able to oppose those violations of the constitution, which the will of the national assembly have established, declare, that they cannot be considered as military enemies, since they have renounced their commissions in the French army, and and much less as connected with that part of their countrymen who have been induced by interests, sentiments, and opinions, absolutely different from

theirs, to unite themselves with foreign powers now at war with France; but merely as strangers, who demand a free passage, which the right of nations entitles them to, and of which they will avail themselves, in order to repair speedily to a territory, the government of which may not be at present engaged in hostilities against their country.

LA FAYETTE.

Rockfert, Aug. 19.

#### DOMESTIC.

Warwick, Aug. 21. this morning, about half past seven o'clock, the *soi disant* duke of Ormond was ordered to the bar: — his deportment was graceful and becoming; and the whole court, which was extremely crowded, seemed to feel a painful sensation, that a young man so accomplished should have reduced himself to so dreadful a situation by his own imprudence.

The first jury was challenged—another being sworn, he was put to his trial, which lasted till near twelve o'clock, when the jury acquitted him.

He spoke upwards of an hour in his defence, and displayed very great ability.

The young lady, who accompanied him from Leicester to Birmingham, was present with her father; and it is said, her countenance refused to conceal the agitation of her mind during the trial, and when the jury pronounced the words, “*not guilty*,” the most

charming sweetness resumed the place of the most gloomy suspense.

The evidence of Bruce the thief-taker, was somewhat defective—but the following axiom, it seems, determined Griffin's fate: “ If an officer be killed in endeavouring to break into an apartment to secure an offender, it cannot be deemed murder, except the officer shall have acquainted the offender by what authority, or for what offence, he is about to secure him.

Griffin is still held by two detainers; one on the charge of Mr Hammond, banker, of Newmarket; the other on that of Mr Green, jeweller, in Bond-street.

His majesty lately received a present from the duchess Condesa de Campo Alange, consisting of some of the finest Spanish sheep that her country could afford. As some return of kindness to the fair Spaniard, his majesty has sent eight fine bay horses of uncommon beauty, which were shipped off from the tower on Wednesday last for Bilboa, and are to be conveyed with all due care to their intended mistress.

The commissioners for building a bridge across the river at Montrose, have contracted with Mr Alexander Stevens; and a few days ago this important undertaking was commenced.

## SHORT CHRONICLE OF EVENTS.

Oct. 10. 1792.

### FOREIGN.

#### France.

The most remarkable incident which has occurred in France since our last, is the meeting of the national convention, and the consequent dissolution of the national assembly.

Previous to the meeting of the national convention, the Jacobin club, on the 17th of September, came to the following resolves, which they took care to publish as generally as possible, for the obvious purpose of overawing the assembly.

“That a scrutiny shall be made of the national convention, for the purpose of expelling from its bosom such suspected members as may, in their nomination, have escaped the sagacity of the primary assemblies.

“That all deputies chosen to the national convention who may have attacked, or shall attack the sovereignty of the people, shall be declared incapable of sitting.

“That all constitutional

decrees passed by the national assembly, shall be sanctioned or revised by the people.

“That royalty shall be absolutely abolished, and the punishment of death inflicted on those who may propose the re-establishment of it.

“That the form of government shall be republican.”

#### National convention instituted.

September 21.—Morning. M. Francois said, that in his opinion the national assembly ought to terminate its operations by an act of respect towards the national convention. He therefore proposed that an address should be presented to the new constituent body.

“As soon as it shall be organized,” said he, “our functions will cease, we will then repair to the national edifice in the Tuilleries, to serve it as a first guard, and we will bow before the sovereignty of the people, whom they are going to represent.” He then presented the following address, which was unanimously adopted, and M. Francois was

ordered to present it to the NATIONAL CONVENTION.

“ Representatives of the nation, the members who composed the national legislative assembly, informed that the national convention is constituted, have terminated their functions. They have agreed at the same time, that their last act, as a body, should be to wait upon you in the national edifice of the Tuilleries ; to offer to conduct you, themselves, to the place of your sitting ; to congratulate themselves on having deposited in your hands the reins of authority ; and to set the first example of bowing before the majesty of that people whom you represent.

“ We ought indeed to felicitate ourselves, in a particular manner, for the happiness we enjoy of seeing you assembled ; because it was in obedience to our voice that the nation chose you ; and because, in yielding to our invitation, all the primary assemblies of France have unanimously sanctioned those extraordinary measures, which we thought ourselves obliged to pursue to save twenty-four millions of men from the perfidy of one. (*Loud applause.*)

“ The difficult circumstances in which we have been since the memorable epoch of the 10th of August, would have doubtless required those resources and that plenitude

of power which you alone now possess. We have provisionally done away every thing that the urgent interests of the people required, without encroaching upon the authority which was not delegated to us.—In short, representatives, you have arrived, invested with the unlimited confidence of a great and generous nation ; commissioned by it to let its external enemies hear the voice of its independence ; authorised to enchain at home the monster of anarchy ; in a situation to remove all obstacles, and to make every head, without distinction, bend under the protecting and avenging sword of the law. No pretences are any longer left for confusion, no objects for division. It is now the nation which wishes for liberty and equality, and which has appointed you to establish them upon a foundation which never can be shaken.

“ Discharge, representatives, your important duties ; realise the promises which we have made in your name ; and may the French people soon be indebted to you for three gifts, the first and the most valuable that Heaven can bestow upon mankind, Liberty ! Laws ! Peace !—Liberty, without which the French people can no longer live.—Laws, which form the most solid basis of liberty.—And Peace, which is the only object, and the only

end of war.—Liberty! Laws! Peace! these three words were inscribed by the Greeks on the walls of the temple of Delphos. You will imprint them with indelible characters on the whole surface of the territories of France,—and *each of us*, when we return to our respective departments, will every where inspire confidence in your wisdom; respect for the existing laws, in expectance of those which are about to proceed from your tutelary authority; submission to the free and popular government, which you are about to establish; and the most sincere wishes for maintaining among all the parts of this extended empire, that unity, of which your august assembly will ever be the common centre and bond of connection.”

After this address was read, and approved, a députation from the national convention having entered the hall; their spokesman said,

“ The national convention has sent us to inform you, that they are constituted, and that they are going to repair hither, to commence their sittings.”

M. Frâncois, who was in the chair, informed the députation, that the national legislative assembly had just decreed, that they should proceed in a body to the Thuilleries, to serve as a guard to the convention.—All the members immediately rose up, and thus terminated,

after the existence of an year, the national assembly, under which the French nation marched with giant strides towards republicanism.

We have inserted the above as a specimen of the mode of proceeding, and manner of arguing in this convention,—we must pass over others more briefly.

Sept. 22. The convention decreed,

i. That all public acts shall be dated, “ *The first year of the French republic.* ”

ii. That the state seal shall be changed, and have for legend, “ *French republic.* ”

iii. That the national seal shall represent a woman sitting on a bundle of arms, and having in her hand a pike, with the cape of liberty upon it; and on the exergue, “ *Archives of the French republic.* ”

iv. That petitioners shall not be admitted to the bar, but during the evening sittings.

They next resolved,

i. That all citizens of the republic, without distinction, are eligible to vacant places.

ii. All the members of administration, and of judiciary bodies, now in the exercise of their functions shall be changed.

Mr *Thomas Paine* opposed this last motion, thinking it a matter of too much consequence to be determined without deliberation; but he was over-ruled.

Sept. 23. It was decreed,

i. That the military committee shall have access to the convention as often as they shall ask leave.

ii. That there shall be formed a committee of war, which shall be divided into two sections, who shall concert together.

Sept. 24. The sitting terminated by the following decree:

i. The French republic no longer acknowledges princes.

ii. The national convention, in consequence, suppresses all appenages.

Sept. 25. Mess. Robespierre and Marat were accused by name, as having promoted the shameful assassinations that had lately taken place in Paris. The former vindicated himself by an appeal to his public life; but the reply to his defence was decisively given by M. Barbaroux, a deputy from Marseilles, who declared that he had been applied to by M. Panis, a member of the assembly, to conciliate the Marseillais to the support of a plan, the bent of which was "to elevate the virtuous Robespierre to the dictatorship!" M. Marat's vindication was as inconclusive as the preceding. He replied by avowing his opinion of the necessity of a dictator; and when the assembly expressed their abhorrence, he clapped a pistol to his head, and declared that he would blow out his

brains, in the face of the convention, if they proceeded to a decree of accusation!—The motion for a decree being passed over, left this man without a plea for this false heroism; otherwise, at once debauched and desperate, he might have resembled Catiline both in his life and end.

M. Danton, who, with Chabot and some few others, were more than suspected of entertaining similar projects, agreed in the condemnation of Marat.

The conclusion of this unexpected business was a decree declaring, simply, "That the republic was *whole* and *indivisible*."

Sept. 29. Several of the ministers having resigned, some of them on account of their being members of the national convention, a long debate took place, whether ministers could be chosen from among the members or not; when it was at length decreed, "that the ministers could *not* be chosen from among the deputies."

This decree brought on a discussion respecting the two ministers, Roland and Servan, who both persisted in giving in their resignation. The former, because he had been chosen a deputy to the national convention; and the latter, because the state of his health did not permit him to support the fatigues of office.

A member here bestowed

the highest praises on the two ministers, and reminded the convention of the important services they had rendered to their country, to which they had sacrificed the greater part of their property. "The minister for the home department (said he,) rendered abortive a great part of the plots formed in several of the departments, and he gave vigour to the administrations which, before his coming into office, were in a state of the most deplorable apathy, and exhibited the most criminal indifference for the good of the republic. The minister of war had shewn what might be accomplished by the activity of an honest man. He had used every exertion to defeat the machinations of foreign enemies, and even injured his health so much that he is now confined to his bed. On these considerations I think every good citizen must wish that Roland and Servan would retain that post at which they have been placed by the confidence of the nation. I move, therefore, that these citizens may be invited in the name of their country to continue to serve it."

Jean de Brie said, this would be offering an insult to other citizens, as it would amount to a declaration that none of them were capable of filling up places in the ministry.

Buzzot, after tracing out in an elegant speech the services by which these ministers had immortalized themselves, was of opinion that the convention was the dispenser of the gratitude of the nation, and that it would not disgrace itself, as had been pretended, by inviting Servan and Roland not to quit their functions.

The discussion was about to be terminated, but a member having moved, that Danton should also be invited to discharge, at least provisionally, the duty of minister of justice, that gentleman expressed his indignation that the representatives of a free people should debase themselves so far as to invite.

"It is probable, and even certain, (continued Danton,) that the minister of war cannot yield to your invitation, as the state of his health will not permit him; and is it not a real disgrace to you to expose yourselves to the mortification of a refusal? But as every one here has the right of expressing his sentiments, I shall declare mine like a son of freedom. People talk to you continually of Roland and his virtues; I render him that justice which is due to him, but I think his talents are too much extolled. If you mean to address your prayers to him, address them also to his wife, for she also had a share in the administration.

I also have been a minister, but I acted alone, and I did every thing alone ; but if Roland had not had a wife, he would not have obtained so much praise. Without doubt, and proofs of it exist, he does not possess that greatness of character, and that sublime intrepidity which are not intimidated by great dangers. I will tell you, that in the last moments of the crisis, he shewed a want of firmness, and declared in the council his intention to quit Paris." *(This speech was often interrupted by loud murmur.)*

Barrere, in the warmth of the debate, improperly applied to Danton the expression of that Athenian, who, being asked why he voted against Aristides, replied, " I am tired of hearing him stiled *The just.*"

Another member severely censured this application ; " an expression (says he) has just now been quoted, which can hardly be believed to have come from the mouth of a son of freedom. Aristides, the wisest man in Greece, was indeed banished by his ungrateful countrymen ; but he was soon recalled, and the villains who had represented him as an enemy to his country, received a just punishment for their intrigues. The Roman history furnishes an instance of similar injustice. Camillus saw also his virtues and long services forgotten.

He was also obliged to become an exile ; but the dangers of their country made his fellow citizens sensible of their fault, and Camillus was invited to forget his injuries. He returned and saved Rome from the destructive fury of the Gauls."

Cambon.—" We have been republicans eight days, and yet we abandon ourselves to all the infatuation of slaves. Be on your guard, least gratitude should hurry you too far ; excess of gratitude conducts always to despotism. Let us not forget what happened among the Dutch ; one of their fellow citizens rendered them great services, which were extolled to the clouds ; they created him Stadtholder, and this Stadtholder at length crushed their liberty.—I move for the order of the day."

Louvet replied to the reproach thrown out by Danton against the minister for the home department, for having shewn a want of firmness and courage.—" During the days of proscription," said he, " I waited upon Roland, for I thought that those who had endeavoured to direct the poignard of assassins against him might at length see their perfidious designs crowned with success. When I saw Roland on that occasion, he said, ' If I am proscribed I will calmly wait my fate, and I hope that

'This murder will be the last.' Was this pusillanimity, as has been said by Danton?"

Lasource.—"Without wasting our time in enquiring whether the talents ascribed to Rolland were entirely his own, or in a great measure those of his wife, I am of opinion that a public man ought not to be reproached for having a prudent wife, and even for sometimes following her wise councils. The reflection that has been thrown out by Danton is unworthy of a legislator."

After defending Rolland against all the calumnies that had been thrown out against him, Lasource moved the previous question, on all the motions that had been made, saying, the convention ought to be very sparing of that exaggerated praise of which enthusiasm was often apt to be inconsiderately lavish; and that extravagant praises served for the most part only to excite the ambition of individuals, and to conduct gradually to despotism. "An honest man," added he, "ought to be contented with the tacit approbation of his fellow citizens, and the testimony of his conscience."

They then passed to the order of the day.

#### Jacobin club.

The foregoing are the principal transactions of the national convention; but that the true constitution of France

may be known, it is necessary to advert to the transactions in the Jacobin club, of which the following is a specimen:

September 23. M. Stephanopoli read a speech, the intention of which was, to engage the society to send a company of an hundred men every day to work at the camp of Paris. This proposal was combated by M. Chabot, who said, that as each of the members was obliged to discharge this duty in his section, it would be absurd to give the society, by this act, a sort of existence which it could not have.

It is not by petitions to the national convention that we ought at present to make it adopt such, or such a plan of defence for Paris.

Let your governors know by your discussions, which they will hear of one way or other, that your sole desire is to see your government soon fixed. It is in the first moments of its existence that you ought to expect from it those vigorous measures, which the conduct it has observed does not give us reason to hope to see it long pursue. The first day of its sitting, it *overturned the rotten trunk of royalty*, and yet the next morning it *was afraid to apply the hatchet to the small branches of that tree*. It spared the tribunals; and, by this act of weakness, it descended as low as the legislature. Dread that influence which intrigue will not fail to gain amongst you; and if intrigue is to be apprehended, it is from certain constituents, who, because they have done less hurt than their colleagues, pretend to the reputation of patriots. If intrigue is to be dreaded, it is from some legislators, who, though they voted against La Fayette, are not the more patriots, as M. Simon has very justly observed.

I must again repeat it—Let us finish our government: intestine war will be terminated when we come to that point; and we shall have a good go-

vernment when we were banished from the ancient declaration of rights, and the ancient constitution, those parasite branches which the constituents suffered to grow there.

You are told that an extensive plan of a government must be presented. Nothing is more pernicious than such an idea; for an extensive plan requires much time to be formed, and much time to be discussed. Besides, it is not an extensive plan that we have occasion for,—our bases are laid, and our most important object is to have a government as speedily as possible.

I have already said, that the tribunals ought to have been dissolved the day after you abolished royalty, for that must be done in order to substitute arbitration in the room of their *sentences and decisions*. Had an arbitrator been appointed in each canton, that office would certainly have been given by the people to the honestest man in the district.

The same fear of disorganization has prevented the army from being *nationalized*. What difficulty would there be in establishing national volunteers, and causing the soldiers to elect their own officers? Such an operation would not require much time, and would occasion less disorganization in the army, than the leaving such traitors as Monresquieu at the head of it.

To establish the religion of the law, all citizens, without distinction, must be invited to have a share in the formation of the law. Every Sunday after mass, let the operations of the legislature be read to the people; let the people discuss them, and consider whether they are proper or not to be adopted. When a law shall have thus been approved by the majority of the people, you need not be afraid that a single individual will be tempted to break it.

September 24. Chabot moved that the order of the day should be invariably fixed on the means of *forcing the convention* to organize the government speedily, and before they proceeded to any other business.

Some members found fault with the word *forcing*; but Chabot said, that if the Jacobins of Paris had not a right to *force* the convention to do such and such a thing, the Jacobins of the whole empire, that is to say, all good citizens, had incontestably that right; for, added he, constituents have always a right to *force* their representatives to obey their orders, and if the constitution be not fixed by the end of November or December, and if it be not revised by the people before the end of March, our liberty is lost.

A curious debate arose on this assertion, in which Le Vasseur, in a very manly way, said, that as a representative of the nation, it was neither in his principles, nor his character, to be forced to any thing. —During the tumult of debate which ensued, M. Petion, with a number of his friends, entered the hall, and the president's chair being offered to him, he accepted it. The evident intention of their coming was to resist, in its commencement, a plan formed by Robespierre, and his party, to instigate the people against the resolutions which had been come to by the convention that day, for courting the instigators to massacre and pillage—for procuring a guard from the 83 departments to overawe the mob of Paris, &c.

Faber began the attack, and asserted, that the proposed measure was a direct censure on the conduct of the true patriots, who had saved their country from destruction. He was also very severe against the mover, Buzat, who was warmly defended by his friend Petion, and after a tumultuous discussion, the president and his party had sufficient interest to get the question adjourned.

From these specimens, our readers will be able to form some idea of the state of parties in France, of the motives that actuate the different leaders, and the means they rely upon for effecting their purposes.

## SHORT CHRONICLE

### OF EVENTS.

Oct. 31. 1792.

#### FOREIGN.

##### *France.*

SINCE our last, a very important revolution has taken place in France, which has totally altered the situation of affairs. The combined armies of Prussia and Austria, weakened by disease, and distressed by want of provisions, have been driven from the French territories with ignominy; and the allied powers are now, as is usual on such cases, recriminating on each other, — each party wishing to throw the blame from his own shoulders on that of the other; so that it is not improbable that it may end in a serious rupture between the courts of Berlin and Vienna; the consequences of which can hardly fail of being very prejudicial to both. Russia on the one hand has, during this ill concerted expedition on their part, acquired such a decided superiority in Poland, as to be able to govern there with as absolute authority as at Pittsburgh; and will no doubt make use of

that power, if the empress lives, to check the power of Prussia on that side, while, on the other hand, there is scarcely room to doubt that the Austrian Netherlands will seize this opportunity of freeing themselves from the Austrian yoke, which they have considered for several years back as a grievous burden. So much for the ill judged meddling of these proud potentates in the internal affairs of another state. Pity it is that a similar fate has not always attended the like unjustifiable interference of foreign powers in the affairs of other nations. The emigrants are entirely shaken of by all parties, and are reduced to the most deplorable distress.

In consequence of this unexpected success, and of the progress of the French in Savoy, where the weakness of a vain prince, and the wickedness of a corrupted court have long paved the way for their reception; so that Montesquieu has now possession of a

a great part of the country, without having met with the smallest opposition; and Nice has fallen into the hands of France without a blow, the spirits of the people of France are elated to the most extravagant degree. They talk of making war on all the potentates of the earth. Their ships are to take possession of Ostia; they are to make an irruption into Rome, carry off the pope, and have him hanged along with Lewis and Antoinette at Paris. While one part of their fleet proceeds to South America to overthrow the power of Spain there; another part of it is to proceed to Constantinople, demolish the grand seignior, proceed across the Black Sea, make a league with the Tartars, and send them upon the Czarina to dethrone her. Such is the substance of the military operations of France, as copied from one of the most popular papers in Paris.

Another revolution of a more important nature begins to be developed. Since the meeting of the national convention, a firm determination has been there manifested to check that spirit of anarchy, which has so long prevailed to the disgrace of France, the destruction of freedom, and the overthrow of that liberty they wish to establish. The following speech of the president

of the convention indicates a spirit that does honour to that body, and if they shall be able to act with the same judicious firmness in future, they will be entitled to a great share of applause; but they have an arduous task to accomplish, and there is great reason to dread they will not yet be able to accomplish it.

Oct. 7. A deputation of the section of Paris, called *Gravilliers*, requested that the convention would speedily pass sentence on the king; and complained at the same time of several decrees of the convention. "The men of the 10th of August, (said they,) will never suffer those in whom they have placed their confidence, to disown for a moment the sovereignty of the people. Courage in a free people is a virtue, and we will never depart from this principle,—that if it is just to obey the laws, it is just also to resist despots, under whatever mask they may conceal themselves. We are of opinion, that our interest requires that we should make our elections by open vote."

President.—"Citizens, the right of petitioning is a sacred right; but those who present themselves at the bar to employ it, ought not to forget that respect which they owe to the representatives of the people.—I do not mean to

the people of Paris; but to the people of all France. The national convention acknowledges only one people, one sovereign,—that is, the union of the citizens of the whole republic. The representatives will not be compelled by threats to violate or discharge their duty.—They know it, and they will render themselves worthy of that confidence with which the French republic has invested them. They have nothing to fear, and they fear nothing from the people of Paris; and what you said, to assure them, was perfectly useless. They entertain neither fear nor suspicion. In short, the national convention will always hear with pleasure the language of liberty, but it will never suffer that of licentiousness. It will take your petition into consideration, and admits twenty of you, the number pointed out by the law, to the honours of the sitting."

The convention ordered this answer to be printed; but great exertions are making in the Jacobin clubs to set this decision at nought.

The conduct of general Dumourier, was equally decisive and praise worthy, in repressing the brutality of two battalions of the federates of Paris, who massacred in cold blood four prisoners they had taken, in spite of the efforts of

their officers to prevent it. The general ordered these two battalions to be surrounded, and forced to lay down their arms, standards, and uniforms.—That they should be forced to deliver up the criminals who committed the inhuman massacre at Rhetel, who, under an escort of 100 men, should conduct them to Paris, and deliver them up to the national convention.—That the rest of the battalions should be broken—their arms and habits laid up in the military store,—and their colours sent back to their districts, to be by them confided to men more worthy to bear them. This measure was highly applauded by the convention.

#### *Invasion of Savoy.*

M. de Montesquieu, who has been suspected, accused, and suspended from his command by the National Assembly, has actually invaded Savoy, and has taken posseſſion of Chamberry, belonging to that state, without resistance. The extreme weakness of the king of Sardinia, and the extravagant conduct of the court of Turin for some time past, render it probable that they will meet with little opposition from that quarter, unless the party of the prince of Piedmont, shall finally preponderate in the national council.

#### *Switzerland.*

The Swiss cantons are also

threatened with an invasion from France. M. Ferrere was advancing with rapid progress to take possession of a strong pass, into the republic called *Pierre Pertuis*, and troops were preparing to dispute it, when, by the intervention of deputies from Bienne, hostilities were prevented for the present, on the commissioners of the cantons giving their word that the Austrians should not be allowed to take possession of that pass.

*Miscellaneous.*

A popular insurrection has taken place at Belgrade; the Turkish garrison were forced to make a precipitate retreat into the citadel, where they are now besieged in form by the insurgents. The latter have likewise stopped the post to Constantinople.

Leyden, Sept. 28. A number of papers are now circulated here, which assert, that the principal promoters of the revolution in France are providing a retreat in one of the islands of the Grecian Archipelago, which they mean to purchase from the Turks, in case any misfortune shall happen; and that their design is to fit out every vessel belonging to the state which may be in a condition to put to sea, and to carry all the gold and silver out of the kingdom. They have already, as is pre-

tended, seized on all the Crown jewels, and their endeavours to discover the robbers are only a mere deception to amuse the public.

M. la Fayette was openly insulted by the people in passing through Cologne; and, had it not been for his guard, he would perhaps have been massacred. He will be immediately carried from Wesel to Spandau, a state prison which is well known.

The city of Geneva has suffered more by the French revolution than any other town or city upon the continent, as the whole funded property of the place rested upon the French funds; the fall on which, added to the fall of the exchange, have reduced their incomes more than half of their original value.

A very spirited correspondence has been for some time past, carried on between the courts of Vienna and Petersburg. The affairs of Poland are thought to be the object of these negociations, in which the two courts do not altogether agree.

All advices from Berlin agree in saying, that a great fermentation prevails in that city, and that the people exclaim loudly against the conduct of the king of Prussia, who, to satisfy a momentary impulse of vain glory, is exhausting his

country of men and money. These considerations have occasioned a coolness between the generals of the emperor and those of the king of Prussia, who, dreading some commotion in his own kingdom, wishes to extricate himself from the league formed against France with as little hurt to himself as he can, by throwing all the odium upon the emigrant princes, who, indeed have imposed upon the Prussians, by making them believe that the campaign would only be a pleasant summer excursion. It is impossible to describe the shame and vexation manifested at the Hague on account of this disappointment, as the defeat of the French was considered as an event beyond the possibility of a doubt.

Dr Kemp, of the college at New York, writes to his friend in Aberdeen thus, dated 28th July last—The legislature, last session, passed a law for opening the navigation from New York to the lakes, with the Hudson and Mohawk rivers, by which, at a small expence, there will be an inland navigation of 2000 miles, one of the first in the world.—This gives a very high idea of the local advantages of America.

The count Szapara, the principal governor the archduke Palatine of Hungary, go-

ing to Béhomia on the 15th ult. to meet a princess of Clary, to whom he was to be married, was attacked at the distance of four posts from that place by a band of robbers, who cut the traces of his carriage, forced the postillion to retire, murdered one of the count's chasseurs, as well as his valet de chambre, and stabbed the count himself with a knife in seven places. They then robbed the carriage, in which there were valuable effects and money to the amount of 15,000 florins. Two assassins who were wounded by the chasseur have been taken.

The Spanish minister has declared officially, and in the name of his court, to the vice chancellor of court and state, that the shocking scenes of the 10th of August have induced his catholic majesty to declare war on the usurpers of the regal dignity in France; and that the Spanish troops on the frontiers of France have received orders immediately to penetrate into that kingdom.

The senate of Venice has determined against entering into the European alliance to subdue France. The reason they assign is not the best that might, or could be given, yet is good enough---namely, that their forces would add little strength to the league, and that they are needed at

home to prevent the epidemic influence of the French opinions from spreading.

Letters from Lyons, state, that the proclamation declaring France a republic, was made there amidst a general consternation. Such, however, is the present state of France, that the will and sentiments of individuals are suppressed by the popular licentiousness inspired by the commissioners of the convention and the executive power. At Rouen, of twenty-six sections, two only were for a republican form of government; all the others were in favour of royalty.

The emperor has published an edict strictly prohibiting the introduction of French political writings in the Netherlands.

Letters from St Domingo, received at Nantz, and which came down to the 18th of August, announce a considerable revolt of the blacks at Caves, immediately after a conference between Blanche-laude and the revolting negroes. Thirteen sugar works have been burnt, and of this number are those of Laborde and of Mercy d'Argenteau.

#### DOMESTIC.

Some opposition is expected to be made against the proposition of renewing the East India company's charter, parti-

cularly by some adventuring merchants, who have had several meetings, and are preparing to prove how far the country would be benefitted by the abolition of the monopoly.

There are two travellers from whom much information is expected by the curious—lord Fitzgerald and major Houghton; the first exploring the regions of America, and the other employed in the no less dangerous and difficult task of penetrating into the interior parts of Africa.

Montrose, Sept. 26. Yesterday the foundation stone of the bridge here was laid with the usual solemnities.

This ceremony had been delayed till the arrival of David Scott, esq. member for the county, who had with so much zeal and liberality patronized the undertaking.

About 420 French persons have at present applied for relief. The palace at Winchester, which, in the last war held 11,000 French and Dutch prisoners, is now preparing for their reception; and a thousand may probably be accommodated there, in such a manner as to shew that our charity is not insultingly given. By the notion that the place is a sort of prison, it has, we understand, prevented a greater number from applying.

It appears from the annual abstract of the shipping, which

were registered within the British dominions during the year 1791, that the number was 15,647, which is 636 more than in the preceding year.

By experiments made at Jamaica, it has been proved, that a very rich crimson dye may be obtained from a preparation of the fruit of the manchineal tree; and the colour is not only uncommonly brilliant, but also very durable.

A cheese has been made as a present for his majesty at Norleach Bean, in Cheshire, and is now nearly ripe for use: It weighs thirteen and a half cwt. and is nine yards in circumference—the produce of two meals of milk.—Sir R. S. Cotton, bart. M. P. for the county, is to present it to his majesty.

Seven merchants dining together at the London tavern, each agreed to support a distressed French priest or gentleman, at his own expence, till they should be able to return to their native country.

From the accounts brought by the latest ships arrived from India, two or three weeks ago, it appears that the inquiries made for ascertaining the fate of the Foulis have proved fruitless. The ship has not been heard of upon any coast, and appears to have been lost in the open sea. In what particular manner the ship has so

perished at sea, can only be matter of conjecture.

Mr Dawson, of Liverpool, has presented a petition to the court of East India directors, praying the company's permission, that three sail of his Guinea ships may double the Cape of Good Hope, in order to explore the eastern coast of Africa, at present but little known to European navigators.

According to the latest accounts from the West Indies, the planters of St. Christopher's have peremptorily refused to pay the duty of 41-2 upon the exportation of sugars. Many suits have been brought in the common law court on this account. This is a subject very interesting to the proprietors in the West Indies, as they are, in some respects, involved in the final decision.

#### *Navigation by steam.*

Earl Stanhope's experiments for navigating vessels by the steam engine, without masts or sails, have succeeded so much to his satisfaction on a small scale, that a vessel of 200 tons burthen, on this principle, is now building under his direction.

The expence of this vessel is to be paid by the navy board in the first instance, on condition that if she do not answer, after a fair trial, she shall be returned to Earl Stanhope,

and all the expence incurred made good by him.

From the steps that are now taking, we are hopeful, that the present high price and scarcity of coals will be remedied before the severity of the winter sets in--The quantity of coals brought into this city, from 15th August 1791, to 19th August 1792, was 177,144 carts, exclusive of what came from Leith.

On the 27th current, the corporation of hammermen of Edinburgh, at a full meeting, having taken under consideration the present high price of coals, resolved unanimously, to provide themselves with coals from coalleries more distant than the usual supply, and continue to do so, until the coalowners in the neighbourhood of the city shall reduce them to the usual price.

Lord Thurlow had a private interview of three hours with his royal highness the prince of Wales at Carleton house, on the arrangement of the prince's affairs.

Oct. 26. The Dutch and Flanders mails, arrived this morning, which bring accounts down to the 23d, contain no certain information relative to the operations of the army under general Custine against Metz and Coblenz; but they mention, that since the arrival of a

ier at Berlin, the speedy return of the king, and a peace with France, have been the topics of common conversation in that city.

The family compact, which was to England and Holland a league of hostility, is now, by the declaring France a republic, and by a commencement of war between that republic and Spain, so completely broken and annihilated, as to destroy even the shadow of a hope in the Bourbons of its ever again being established.

A vessel which arrived last week at Liverpool from the gold coast, mentions, that considerable disturbances had arisen there in the month of July last among the slaves belonging to several of the merchant factors, which had been productive of some bloodshed, before order was re-established.

Further accounts mention, that trade is exceedingly dull, numbers of vessels being obliged to return with not one-quarter of their cargo.

At a meeting of the subscribers for making a canal from near Heath to Barnsley, in Yorkshire, the sum of 60,000l. was subscribed in a few hours.

William Tucker, esq. is elected a third time mayor of Trenton; it is remarkable, that he is the father of twenty-two children, and uncle to seventy-five nephews and nieces.

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## ERRATA.

P. 116 l. penult, note, for evils read cavils; p. 140 l. 5 for bir'd read tur'd; p. 141 l. 14. for eight read eighty; p. 148 l. 5 for I in a few copies, read *In an early number*; same page l. 9. from the bottom, in a few copies, for near read nearly; p. 260 l. 14. for attention read attrition; p. 185 l. 7. for zealous read jealous.

END OF VOLUME ELEVENTH.





